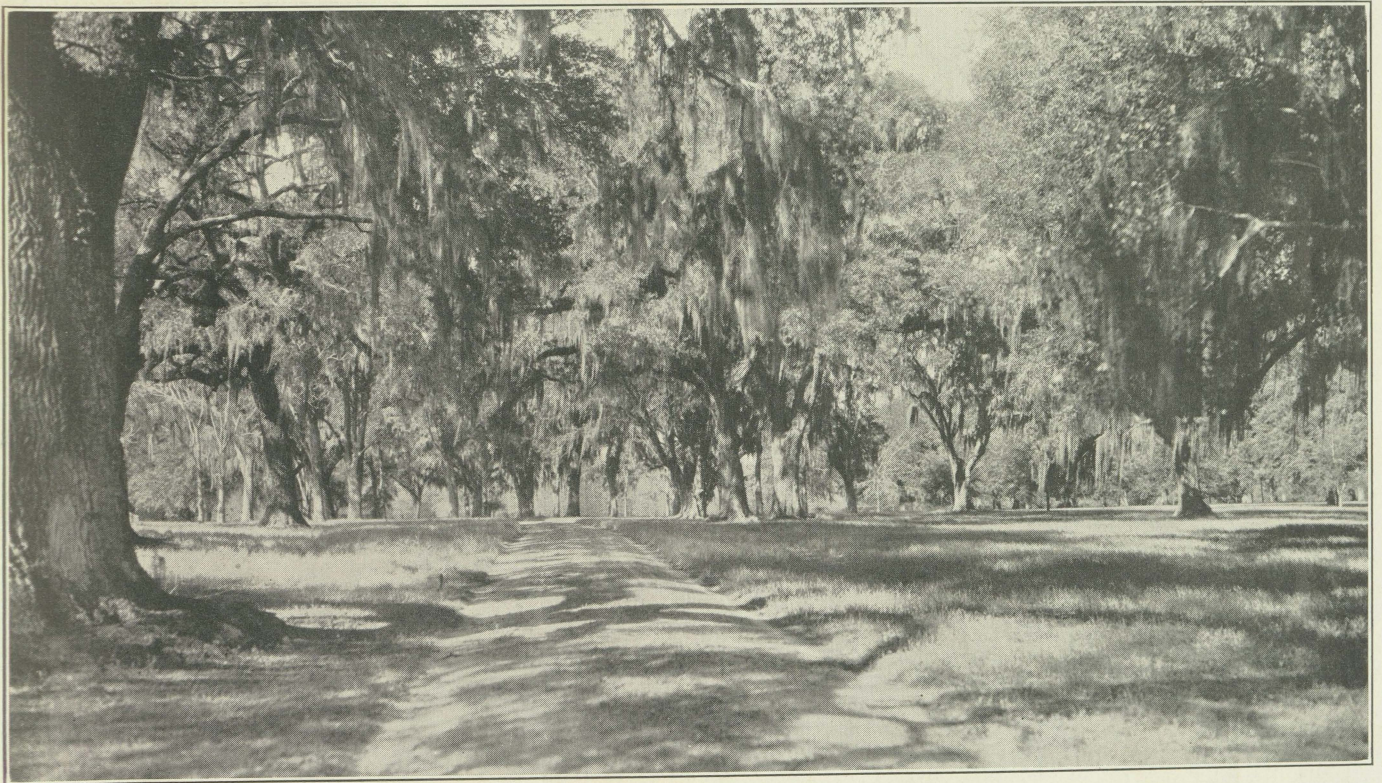


FLORIDA HIGHWAYS

Published by the State Road Department

Vol. VI

No. 8



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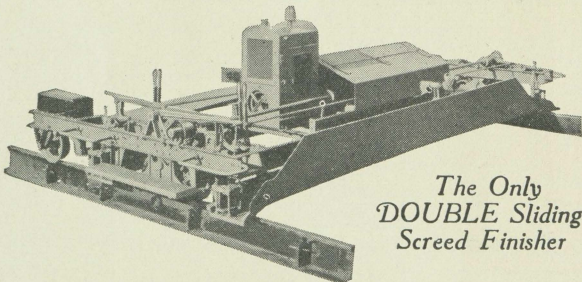
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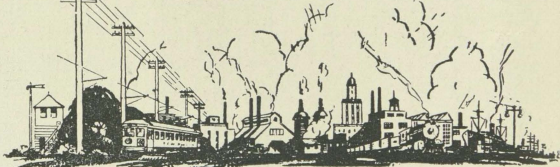
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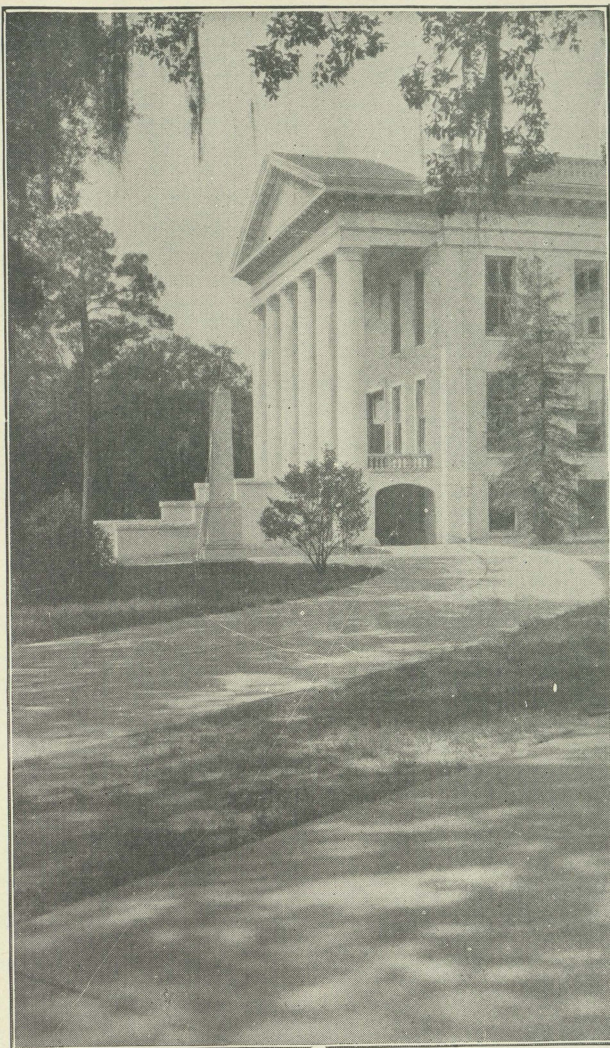


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F L O R I D A

Vol. VI
No. 8



H I G H W A Y S

AUGUST
1929

Transactions at Third Quarterly Meeting of State Road Department Held at Tallahassee, July 23 and 24, 1929

THE Third Quarterly Meeting of the State Road Department was begun and held at the City of Tallahassee, on July 23, 1929, with the following members present: Robert W. Bentley, Chairman; W. A. Shands, Ernest R. Graham and G. D. Perkins. Telegram was received and read from J. Harvey Bayliss, member of the Department, stating his regret that due to a recent operation he was not able to attend the meeting. J. L. Cresap, State Highway Engineer; B. A. Meginniss, Attorney for the Department; W. P. Bevis, Secretary, and H. J. Morrison, Federal Highway Engineer, were also present.

PALM BEACH COUNTY

Road from Belle Glade to Canal Point, by Pahokee

A delegation from Palm Beach County, consisting of Messrs. R. E. Oliver, C. M. Todd, E. G. Kilpatrick,

C. A. H. Jordan, H. Gold, Ralph Osborn and Willard Smith, outlined to the Department the condition of the road between Belle Glade and Canal Point and especially that section between Belle Glade and Pahokee. They presented a resolution from the Board of County Commissioners of Palm Beach County, requesting that the Department repair and reconstruct this road. The resolution recited that an emergency exists, due to the partial destruction of the road by the recent floods and storms, and that transportation facilities for large crops of vegetables are about to be cut off. It also recites that the County of Palm Beach is unable to finance the entire cost of the necessary repairs, and resolves that the sum of \$50,000.00 be provided in the next budget of

Palm Beach County, to be turned over to the Road Department for use in making said repairs.

On motion of Mr. Graham, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, That this Department does declare that an emergency exists on that section of the Canal Point-Belle Glade road between Pahokee and Belle Glade, which emergency will result in stoppage of traffic.

BE IT FURTHER RESOLVED, That this Department do proceed as early as possible to rebuild that section of said road, with the understanding, however, that Palm Beach County shall make available to the Department, as soon as collected, the sum of \$50,000.00 included in said county's budget for 1929.

Palm Beach County—State Road 4—Boca Raton

A delegation from Boca Raton, consisting of Messrs. F. C. Aiken, J. C. Mitchell, G. J. Bender, Crosby Tappen and J. B. Sullivan, requested that the Department complete State Road 4 through Boca Raton, that is, Project 63. The delegation was advised that bids for the construction of the same will be advertised for in the October letting.

RECEIPT OF BIDS

The hour of 10 o'clock having arrived, the Department proceeded to open and read bids submitted pursuant to due advertisement for this date and hour on the projects hereinafter set out, which projects, together with the bidders thereon and the amounts of their several bids, are as follows:

Project 64-A—Road 17—Hillsborough County

Wm. P. McDonald Const. Co.	Lakeland	Plain Cement Concrete	\$260,252.38
H. E. Wolfe Const. Co.	St. Augustine	Plain Cement Concrete	234,172.19
Kendrick & Harwell	Tampa	Plain Cement Concrete	248,508.93
Cone Bros. Const. Co.	Tampa	Plain Cement Concrete	238,258.46
West Const. Co. of Tenn.	Chattanooga	Sheet Asphalt	248,719.03
Cone Bros. Const. Co.	Tampa	Asphalt Block	406,257.04

Project 64-C—Road 17—Hillsborough County

West Const. Co. of Tenn.	Chattanooga	Sheet Asphalt	\$241,765.25
Cone Bros. Const. Co.	Tampa	Asphalt Block	389,938.01
Wm. P. McDonald Const. Co.	Lakeland	Plain Cement Concrete	249,099.09
Cone Bros. Const. Co.	Tampa	Plain Cement Concrete	219,600.67
Kendrick & Harwell	Tampa	Plain Cement Concrete	237,054.35
Stanley L. Crane	Brooksville	Plain Cement Concrete	229,786.53
H. E. Wolfe Const. Co.	St. Augustine	Plain Cement Concrete	217,916.20

Project 728—Road 10—Leon County

Wm. P. McDonald Const. Co.	Lakeland	Plain Cement Concrete	\$236,426.97
Nelson Bros.	Tallahassee	Plain Cement Concrete	252,374.45
Robt. G. Lassiter Co.	Jacksonville	Plain Cement Concrete	221,548.70
Noonan Const. Co.	Pensacola	Plain Cement Concrete	247,821.34
Morgan-Hill Paving Co.	Jacksonville	Plain Cement Concrete	239,525.60

Project 644-C—Road 10—Wakulla County. Rock Base Surface Treated.

T. B. Gillespie, Inc.	Palatka	Rock and Oil	\$ 87,866.10
Morgan-Hill Paving Co.	Jacksonville	Rock and Oil	90,899.73
L. B. McLeod Const. Co.	Tampa	Rock and Oil	81,401.97
Broadbent Const. Co.	Ocala	Rock and Oil	85,960.19
T. B. Gillespie, Inc.	Palatka	Slag and Oil	87,272.59
Morgan-Hill Paving Co.	Jacksonville	Slag and Oil	90,899.73
L. B. McLeod Const. Co.	Tampa	Slag and Oil	81,401.97
Broadbent Const. Co.	Ocala	Slag and Oil	84,773.17
T. B. Gillespie, Inc.	Palatka	Rock and Natural Asphalt	89,053.12
Morgan-Hill Paving Co.	Jacksonville	Rock and Natural Asphalt	92,086.75
L. B. McLeod Const. Co.	Tampa	Rock and Natural Asphalt	83,182.50
Broadbent Const. Co.	Ocala	Rock and Natural Asphalt	87,740.72
T. B. Gillespie, Inc.	Palatka	Slag and Natural Asphalt	88,459.61
Morgan-Hill Paving Co.	Jacksonville	Slag and Natural Asphalt	92,086.75
L. B. McLeod Const. Co.	Tampa	Slag and Natural Asphalt	83,182.50
Broadbent Const. Co.	Ocala	Slag and Natural Asphalt	86,553.70

Project 669-Y—Road 27—Collier County—Rock Base Surface Treated.

Wm. P. McDonald Const. Co.	Lakeland	Rock and Oil	\$ 44,522.50
Wm. P. McDonald Const. Co.	Lakeland	Slag and Oil	45,228.54
Wm. P. McDonald Const. Co.	Lakeland	Rock and Natural Asphalt	46,287.60
Wm. P. McDonald Const. Co.	Lakeland	Slag and Natural Asphalt	46,996.64

Project 695—Road 2—Lake County.

Standard Asphalt Co. Fla.	Winter Park	Rock and Oil Surface Treatment	\$ 87,082.24
Morgan-Hill Paving Co.	Jacksonville	Rock and Oil Surface Treatment	88,545.86
Manly Const. Co.	Ocala	Rock and Oil Surface Treatment	81,536.30
Standard Asphalt Co. Fla.	Winter Park	Slag and Oil	87,850.14
Morgan-Hill Paving Co.	Jacksonville	Slag and Oil	90,081.66
Manly Const. Co.	Ocala	Slag and Oil	81,536.30
Standard Asphalt Co. Fla.	Winter Park	Rock and Nat. Asphalt Treatment	89,769.89
Morgan-Hill Paving Co.	Jacksonville	Rock and Nat. Asphalt Treatment	90,081.66
Manly Const. Co.	Ocala	Rock and Nat. Asphalt Treatment	83,072.10
Standard Asphalt Co. Fla.	Winter Park	Slag and Nat. Asphalt Treatment	90,537.79
Morgan-Hill Paving Co.	Jacksonville	Slag and Nat. Asphalt Treatment	91,617.46
Manly Const. Co.	Ocala	Slag and Nat. Asphalt Treatment	83,072.10

Project 742—Road 13—Alachua County—Rock Base Surface Treated.

L. M. Gray	Gainesville	Rock and Oil	\$ 81,285.25
Morgan-Hill Paving Co.	Jacksonville	Rock and Oil	100,836.05
L. B. McLeod Const. Co.	Tampa	Rock and Oil	77,584.65
Southeastern Const. Co.	Bradenton	Rock and Oil	90,341.75
Duval Eng. & Cont. Co.	Jacksonville	Rock and Oil	87,309.97
L. M. Gray	Gainesville	Slag and Oil	81,285.25
Morgan-Hill Paving Co.	Jacksonville	Slag and Oil	102,631.35
L. B. McLeod Const. Co.	Tampa	Slag and Oil	78,482.30
Southeastern Const. Co.	Bradenton	Slag and Oil	91,239.40
Duval Eng. & Cont. Co.	Jacksonville	Slag and Oil	87,758.80
Morgan-Hill Paving Co.	Jacksonville	Rock and Natural Asphalt	102,631.35
L. B. McLeod Const. Co.	Tampa	Rock and Natural Asphalt	81,175.25
Southeastern Const. Co.	Bradenton	Rock and Natural Asphalt	90,341.75
Duval Eng. & Cont. Co.	Jacksonville	Rock and Natural Asphalt	90,002.92
Morgan-Hill Paving Co.	Jacksonville	Slag and Natural Asphalt	104,426.65
L. B. McLeod Const. Co.	Tampa	Slag and Natural Asphalt	82,072.90
Southeastern Const. Co.	Bradenton	Slag and Natural Asphalt	91,239.40
Duval Eng. & Cont. Co.	Jacksonville	Slag and Natural Asphalt	90,451.75

Project 863—Road 56—Columbia County—Rock Base Surface Treated.

Duval Eng. & Cont. Co.	Jacksonville	Rock and Oil	\$ 32,784.57
L. M. Gray	Gainesville	Rock and Oil	27,344.10
Duval Eng. & Cont. Co.	Jacksonville	Slag and Oil	32,858.18
L. M. Gray	Gainesville	Slag and Oil	27,344.10
Duval Eng. & Cont. Co.	Jacksonville	Rock and Natural Asphalt	33,226.23
Duval Eng. & Cont. Co.	Jacksonville	Slag and Natural Asphalt	33,299.84

Project 866—Road 17—Hillsborough County

Cone Bros. Const. Co.	Tampa	Asphalt Block	\$ 32,351.90
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Project 65—Road 5—Bridge Over Alafia River.

Fred D. Beasley & Co.	Tampa		\$ 94,414.95
Roberts Supply Co.	Tampa		112,167.30
Frost Const. Co.	Tampa		113,244.20
E. F. Powers Const. Co.	West Palm Beach		107,159.23
Just & Shaw Const. Co.	Miami		95,731.35
W. S. Lockman Const. Co.	West Palm Beach		105,238.45
C. T. Dawkins, Inc.	Tampa		100,062.40
Austin Bros. Bridge Co.	Atlanta		95,969.45

Project 68-A-1—Road 4—Bridge Over Palm Beach Canal.

Powell Bros.	Ft. Lauderdale	Without Bascule	\$ 56,399.05
Wm. G. Just Eng. Co.	Miami	Without Bascule	63,277.70
W. S. Lockman Const. Co.	West Palm Beach	Without Bascule	62,790.81
E. F. Powers Const. Co.	West Palm Beach	Without Bascule	65,573.80

Separate Bids on Bascule Span.

American Bascule Corp.	Pensacola	Concrete Floor	\$ 41,190.00
Nashville Bridge Co.	Nashville	Concrete Floor	33,666.00
W. S. Lockman Const. Co.	West Palm Beach	Asphaltic Plank	23,000.00
E. F. Powers Const. Co.	West Palm Beach	Asphaltic Plank	27,000.00
Tampa Shipbuilding Eng. Co.	Tampa	Asphaltic Plank	25,996.00
American Bascule Corp.	Pensacola	Asphaltic Plank	27,539.00
Nashville Bridge Co.	Nashville	Asphaltic Plank	24,727.00

Project 68-A-2—Road 4—Bridge Over Himmarshee Canal.

J. Y. Gooch & Co.	Miami		\$ 39,290.20
Powell Bros.	Ft. Lauderdale		29,033.50
Morgan-Hill Paving Co.	Jacksonville		31,495.60
W. S. Lockman Const. Co.	West Palm Beach		36,288.65
Everglades Const. Corp.	Hialeah		29,311.31
Foley & Milane	St. Augustine		25,185.30
Wm. G. Just Eng. Co.	Miami		28,106.20

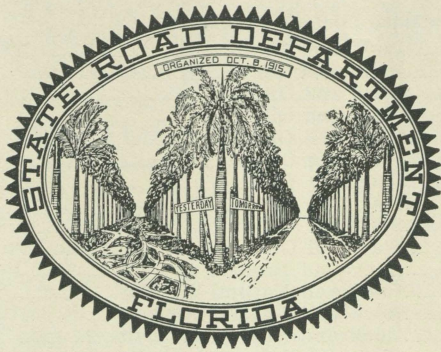
Project 68-A-3—Road 4—Bridge Over Tarpon River.

Morgan-Hill Paving Co.	Jacksonville		\$ 27,572.00
Wm. G. Just Eng. Co.	Miami		24,385.90
Foley & Milane	St. Augustine		22,054.00
Everglades Const. Corp.	Hialeah		25,625.91
W. S. Lockman Const. Co.	West Palm Beach		31,327.30
J. Y. Gooch & Co.	Miami		33,493.50
Powell Bros.	Ft. Lauderdale		24,741.60

Project 715-B—Road 28—Bridge Over New River.

J. R. Chambliss	Tampa		\$ 39,948.75
John Johnson	Lakeland		37,903.50
Central Fla. Const. Co.	Green Cove Springs		41,426.95
Kidd Const. Co.	Jacksonville		43,045.74
R. H. Holz	Atlanta		37,440.60
W. J. Sims	Tavares		39,991.10
Frost Const. Co.	Tampa		39,793.50
C. T. Dawkins, Inc.	Tampa		40,063.60
Champion Bridge Co.	Ft. Lauderdale		40,712.26
Austin Bros. Bridge Co.	Atlanta		36,957.73

(Turn to page 5.)



Florida Highways

Published Monthly

Official Publication of the State Road Department

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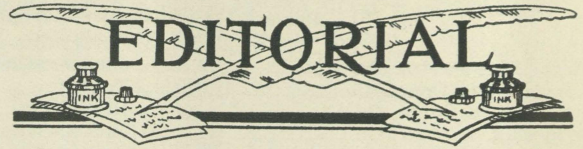
Henry Wilson, Lakeland.....5th Division

Counties—Charlotte, Desoto, Hardee, Highlands, Hillsborough,
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Auditing Division

S. L. Walters, Tallahassee.....Auditor

B. A. Meginniss, Attorney for the Department,
Editor and Business Manager.



J. L. Cresap Resigns as State Highway Engineer

At the July meeting of the Department, James L. Cresap, for six years State Highway Engineer of Florida, tendered his resignation as such, effective September 1. The resignation was accepted by the members of the Department.

Mr. Cresap was the oldest official or employee of the State Road Department from the standpoint of continuous service. Coming to the Department in 1917, he was first placed in charge of all convict activities. Two years later he became Assistant State Highway Engineer, serving in that capacity under Mr. W. F. Cocke, Major Charles A. Browne, and again under Mr. Cocke, during the incumbency by these gentlemen of the office of State Highway Engineer. Upon the resignation of Mr. Cocke in 1923, Mr. Cresap was made State Highway Engineer, which position he has held continuously ever since.

From the first day of his connection with the Department to the present time, he has been intimately connected with every phase of the State's road program. It is a high testimonial to his ability, faithfulness and thoroughness that he is responsible for the greater part of the excellent system of State roads which have been constructed in this State, and no history of highway development in Florida will ever be complete which does not recount his part in that program.

FLORIDA HIGHWAYS extends to Mr. Cresap sincere good wishes for all success, happiness and prosperity in whatever field of endeavor he may enter. No man has ever endeared himself more to his fellow employees in the Department than he and he carries with him their high esteem.

B. M. Duncan to Become State Highway Engineer

Effective September 1st, Mr. B. M. Duncan of Miami will become State Highway Engineer, succeeding James L. Cresap, whose resignation effective that date was accepted by the Department at its July meeting.

Mr. Duncan comes to the Department with a splendid record of achievement in his profession, and with flattering testimonials from those with whom he has been most intimately associated during his career as an engineer.

He is a graduate of the Engineering Department of the University of Tennessee, and came to Florida in 1911 to make a survey of the lands of the Florida East Coast Railway Company, in which work he was engaged until 1914.

(Turn to page 21.)



Proj. 501, Road 6, Calhoun County.

TRANSACTIONS AT QUARTERLY MEETING

(Continued from page 3.)

Upon completion of the reading of said bids, the Chairman stated that awards would be announced by the Department at eleven o'clock tomorrow morning.

Osceola County—Road 24

Messrs. W. J. Steed, J. M. Hill, H. O. Partin, Ernest Mach, W. L. Martin and Pat Johnston comprised a delegation from Osceola county, which presented to the Department a request that bids for hard-surfacing Road 24 in Osceola County be advertised at the earliest possible moment. After full discussion of the matter, the following resolution, moved by Mr. Graham and seconded by Mr. Perkins, was duly adopted:

BE IT RESOLVED: That the Department advertise for bids for the construction of that section of State Road 24 between Holopaw and St. Cloud, and that section in Kissimmee as early as possible; that is to say, as soon as the Federal Highway Engineer is assured that he can secure proper Federal approval.

Road 23—Sumter, Pasco, Hillsborough, Hernando, and Manatee Counties

Messrs. Samuel W. Getzen, J. K. Kelley, E. V. Camp and Ernest McCutchin comprised a delegation which appeared before the Department and requested that Road 23 be definitely and permanently located, with a special view to the construction of that portion of said road in Hernando county with the use of convict labor.

On motion of Mr. Shands, seconded by Mr. Perkins, the following resolution was adopted:

BE IT RESOLVED: That the Chairman be authorized to definitely and permanently locate State Road 23 from Sumterville in Sumter county to Parrish in Manatee county.

Road 36—Citrus and Sumter Counties

Mr. Getzen presented the Department with the contention that the County of Citrus has a contract with the State for the construction of State Road 36. He was advised that members of the Department have no knowledge of such a contract, but that an investigation of the matter will be made.

Mr. Kelley requested that the Department construct the road, with the understanding that the county would reimburse the State for its expenditures when it has available funds. He was informed that the Department can not legally enter into such an arrangement.

On motion of Mr. Shands, seconded by Mr. Perkins, the Department was adjourned until 2:15 o'clock P. M.

AFTERNOON SESSION—2:15 O'CLOCK

Present as at morning session.

Letters Accompanying Bids

It having developed that at the opening of the bids this morning, in a number of instances letters were received from contractors offering a discount if awarded two or more projects, the matter was fully discussed, whereupon, on motion of Mr. Shands and seconded by Mr. Perkins, the following resolution was unanimously adopted:

BE IT RESOLVED: That letters from contractors, offering the Department a discount if awarded contract on two or more projects, shall not be construed as a part of a bid or bids in ascertaining the low bidders.

Road 2—Orange County

Upon motion of Mr. Graham, seconded by Mr. Shands, the following resolution was adopted:

WHEREAS, Road No. 2 forms a part of the Federal Seven Percent System of Florida; and

WHEREAS, The State Road Department is desirous of obtaining Federal funds to aid in the construction of that portion of Road No. 2 from Plymouth to Orlando in Orange county; Now, therefore,

BE IT RESOLVED: That the Chairman is hereby authorized to submit plans and specifications to the Bureau of Public Roads and make application for Federal Aid for said project; and the Department does hereby pledge that the necessary funds will be provided by said Department for meeting Federal aid on said proposed Federal aid project;

BE IT FURTHER RESOLVED: That the State Highway Engineer be and he is hereby directed to commence the construction of said road as soon as all necessary plans are completed.

Hillsborough County—Right-of-Way—Road 5

Upon motion of Mr. Shands, seconded by Mr. Perkins, the following resolution was unanimously adopted:

WHEREAS, The Department has surveyed and located State Road No. 5 in Hillsborough county, between Tampa and the Hernando county line, as is shown by plat of said location on file in its office and in the office of the Clerk of the Circuit Court of said Hillsborough county, and copy of which is hereto attached; and

WHEREAS, Said Department has found and determined and does hereby find and determine that it is necessary, wise and expedient to secure by eminent domain the lands hereinafter described for the purpose of a right-of-way for said State Road No. 5; Now, therefore,

BE IT RESOLVED: That the Board of County Commissioners of Hillsborough county, Florida, be and they are hereby authorized and requested to secure for the Department, by purchase or condemnation, the following described real estate in said Hillsborough county, to wit:

A right-of-way thirty-three (33) feet in width on each side of the center line, as shown on the said plat on file in its office and in the office of the Clerk of the Circuit Court of Hillsborough County, a copy of which is hereto attached and made a part hereof.

BE IT FURTHER RESOLVED: That said Board of County Commissioners of said Hillsborough county be, and they are hereby authorized to use the name of this Department in any condemnation proceedings necessary to carry out the purposes of this resolution and to file all papers necessary therefor under the laws of the State of Florida governing such condemnations.

Levy County—Road 13

A resolution by the Board of County Commissioners of Levy county was presented to the Department and read, in which the Department was requested to construct with convict labor that section of State Road 13 between Bronson and Ellzey, and that in consideration thereof the county would turn over to the Department \$20,000.00 in cash and \$30,000.00 of 5½% Levy county road bonds. It was the sense of

the members that the Department is not in a position to accept the offer and comply with the request.

Gilchrist County—Road 77

Mr. Shands, member of the Department, communicated an offer from Gilchrist county to turn over to the Department the sum of \$46,630.60 in cash, to be used by the Department in the location of State Road 77 and in the construction of a grade on same as far as the money would extend. In connection with the offer there was presented a resolution by the Board of County Commissioners asking for the location of the road.

On motion of Mr. Shands, seconded by Mr. Perkins, the following resolution was adopted:

BE IT RESOLVED: That this Department do accept the offer of Gilchrist county to turn over to the Department \$46,630.60 in cash, and that the Department do use and employ the same in the location of the said road and in the construction of a grade thereon, as far as the funds will extend.

Road 2—Orange County—Plymouth to Orlando

On motion of Mr. Shands, seconded by Mr. Perkins, the following resolution was adopted:

BE IT RESOLVED: That the Department does hereby declare that an emergency exists which will result in stoppage of traffic on Road 2 in Orange county between Plymouth and Orlando.

BE IT FURTHER RESOLVED: That the Chairman be and he is hereby authorized to advertise for bids for the completion of said section of road as soon as Federal approval can be secured.

BE IT FURTHER RESOLVED: That this resolution shall apply to and include the approaches to the overhead crossing at Toronto.

Project 841—Road 115—Walton County

On motion of Mr. Perkins, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED: That the Chairman be and he is hereby authorized to place a force of convicts on the construction of Project 841, Road 115, Walton county, as soon as the county shall have furnished to the Department the necessary right-of-way and the county funds available for such purpose.

Project 706-A—Road 28—Putnam and Clay Counties

On motion of Mr. Perkins, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED: That the Chairman be and he is hereby authorized to advertise for bids for the paving of that section of Road 28 between Florahome and Keystone Heights, the bids to be returnable at the October letting.

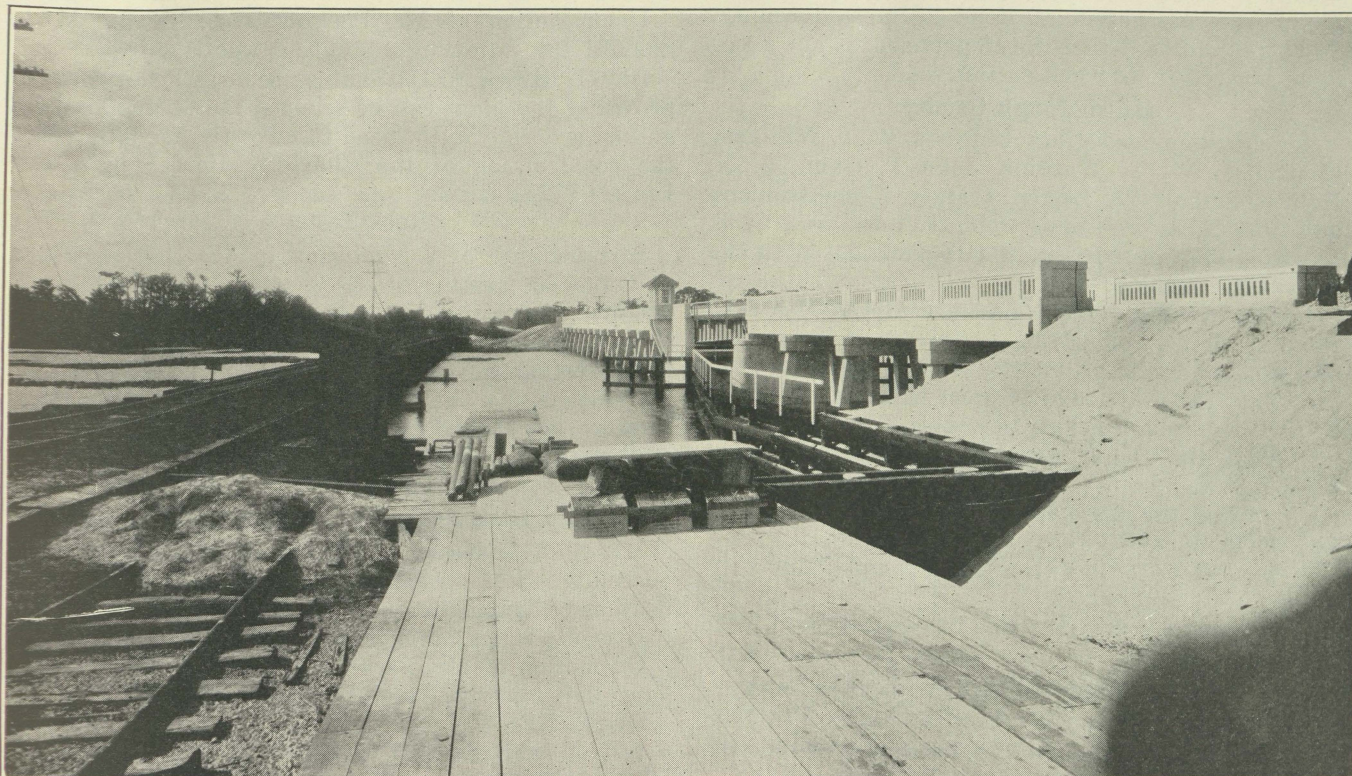
Road 28—Flagler County-Putnam County Line to Bunnell

On motion of Mr. Shands, seconded by Mr. Graham, the following resolution was adopted:

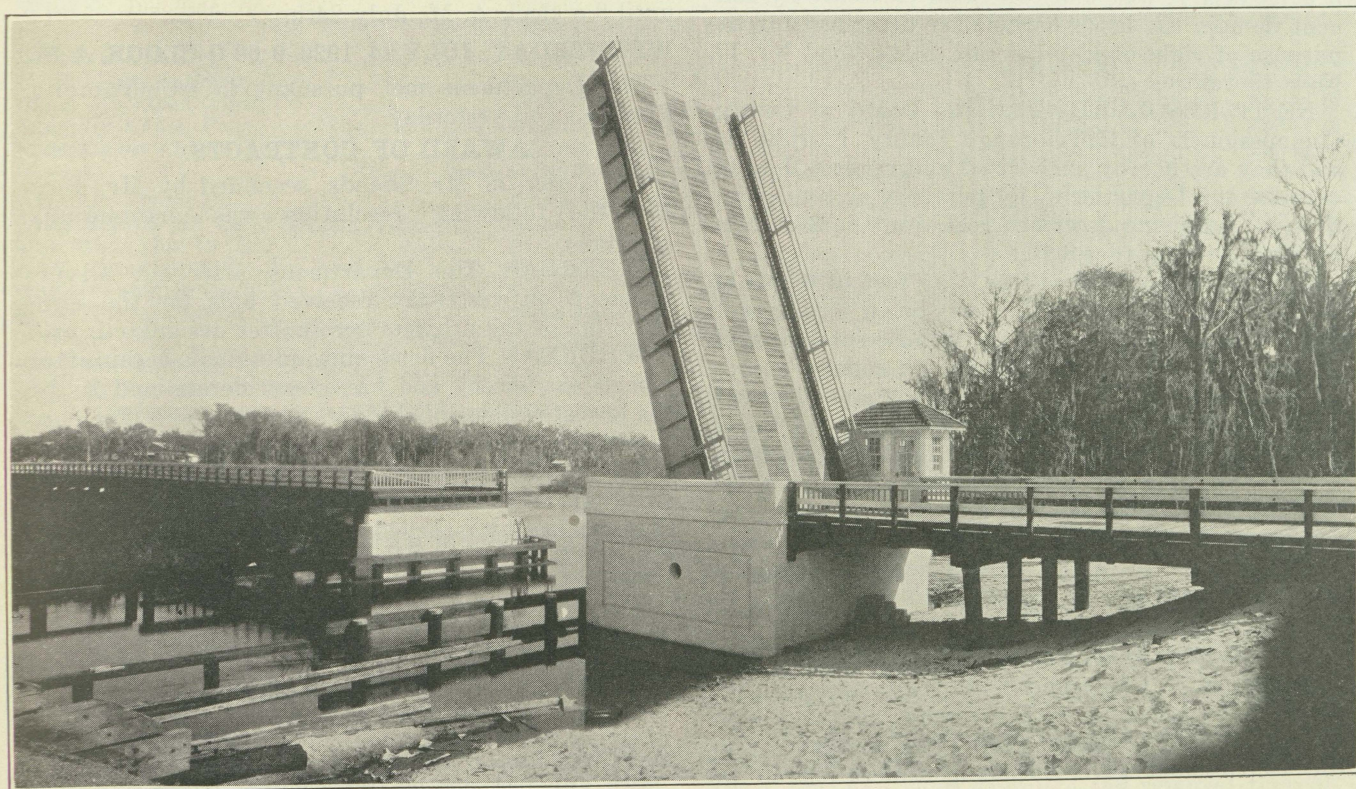
BE IT RESOLVED: That the Chairman be authorized to notify the County Commissioners of Flagler county that the Department is now ready to use its funds and to request that they immediately turn over to the Department the sum of \$175,000.00 available for the construction of Road 28 in said county, between the Putnam county line and Bunnell.

Martin County—Road 85

A delegation consisting of Messrs. A. O. Kanner, F. J. Parker and John D. White and representing



Proj. 53-B, Road 2, Lake County. Dead River Bridge.



Proj. 695-B, Road 2, Lake County. Haines Creek Bridge.

Martin county, requested the Department to complete the construction of Road 85 in said county. They were advised that the Department is not legally authorized to do work on this road.

Hillsborough County

A delegation consisting of Messrs. W. T. Williams, Chairman; W. T. Watkins, John T. Gunn, J. N. Holmes and J. W. Lester, County Commissioners, and Messrs. A. V. Pimm, John T. Lowe and C. T. Dawkins appeared before the Department with the following requests:

1. That the contract for paving Projects 64-A & C, Road 17, be let to a Tampa contractor, if it can consistently be done.

2. That the State take over for maintenance Road 23 in Hillsborough county.

3. That the Department adopt a resolution authorizing the county commissioners to secure the right-of-way for State Road 17 between Plant City and the Polk county line.

4. That Road 23 between Road 2 and Plant City be definitely located.

They were advised that this last request had been provided for.

Hillsborough County—Road 17—Right-of-way

Upon motion of Mr. Shands, seconded by Mrs. Perkins, the following resolution was unanimously adopted:

WHEREAS, The Department has surveyed and located State Road No. 17 in Hillsborough county, between Plant City and the Polk county line, as is shown by plat of said location on file in its office and in the office of the Clerk of the Circuit Court of said Hillsborough county, and copy of which is hereto attached; and

WHEREAS, Said Department has found and determined and does hereby find and determine that it is necessary, wise and expedient to secure by eminent domain the lands hereinafter described for the purpose of right-of-way for said State Road No. 17, Now, therefore,

BE IT RESOLVED: That the Board of County Commissioners of Hillsborough county, Florida, be, and they are hereby authorized and requested to secure for the Department, by purchase or condemnation, the following described real estate in said Hillsborough county, to wit:

A right-of-way thirty-three (33) feet in width on each side of the center line, as shown on the said plat on file in its office and in the office of the Clerk of the Circuit Court of Hillsborough county, a copy of which is hereto attached and made a part hereof.

BE IT FURTHER RESOLVED: That said Board of County Commissioners of said Hillsborough county be, and they are hereby authorized to use the name of this Department in any condemnation proceedings necessary to carry out the purposes of this resolution and to file all papers necessary therefor under the laws of the State of Florida governing such condemnations.

Guard Rail—Resilient Plate Type.

Messrs. E. V. Camp and J. R. Watts appeared before the Department with reference to the use of guard rail of the resilient plate type, and asked that the Department give serious consideration to its use.

Project 772—Road 5—Charlotte Harbor Bridge

Upon motion of Mr. Perkins, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED: That as soon as Federal approval of the plans can be secured the Chairman be and he is hereby authorized to advertise for bids for the construction of the Charlotte Harbor bridge, Project 772, Road 5.

Rock Tests.

In pursuance of a resolution by the Department at a former meeting, J. L. Cresap, State Highway Engineer, submitted to the Department the report on tests of Ojus and Meteor rock made by Mr. Harvey Hall, Testing Engineer for the Department. After fully discussing the matter, it was agreed that the Engineering Department will recommend to the U. S. Bureau of Public Roads its approval of the use of such local rock under proper specifications.

Liquid Lake Asphalt in Surface Treatments

Mr. Cliff Anderson and Mr. L. G. Hitchcock appeared before the Department and requested a specification reducing the quantity of asphalt in surface treatments when liquid lake asphalt is used in same.

On motion of Mr. Perkins, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED: That the Department do, as a test of said material, use one tank car of liquid lake asphalt on the surface treatment of State Road 10 in Wakulla county.

Consideration of Bids.

The Engineering Department submitted to the members the tabulation of bids received at the morning session of the Department. The Department thereupon proceeded to a consideration and discussion of the several bids. Pending the further consideration thereof, the Department was, on motion of Mr. Graham, seconded by Mr. Shands, adjourned until 9 o'clock A. M., July 24th.

WEDNESDAY, JULY 24, 1929, 9:00 O'CLOCK A.M.

The Department met pursuant to adjournment. Present as on yesterday.

AWARD OF CONTRACTS.

On motion of Mr. Shands, seconded by Mr. Perkins, the following resolution was unanimously adopted:

WHEREAS, This Department, after due advertisement, on yesterday received bids for the construction of the projects hereinafter designated, and

WHEREAS, The firms and individuals hereinafter named are hereby and have been determined to be the lowest responsible bidders for the respective contracts hereinafter named; Now, therefore,

BE IT RESOLVED: That contracts for the construction of the projects hereinafter listed be and they are hereby awarded, as follows:

Proj. 64-A, Road 71, Hillsborough county—Plain cement concrete—H. E. Wolfe Construction Co.	\$234,172.19
Proj. 64-C, Road 17, Hillsborough county—Plain cement concrete—H. E. Wolfe Construction Co.	217,916.20
Proj. 728, Road 10, Leon county—Plain cement concrete, resilient plate guard rail—R. G. Lassiter & Co.	223,380.20
Proj. 644-C, Road 10, Wakulla county—Rock base with rock and oil treatment—L. B. McLeod Construction Co.	81,401.97

Proj. 742, Road 13, Alachua county—Rock base with rock and oil treatment—L. B. McLeod Construction Co.	\$ 77,584.65
Proj. 669-Y, Road 27, Collier county—Rock base with rock and oil treatment—Wm. P. McDonald Const. Co.	44,522.50
Proj. 695, Road 2, Lake county—Rock base with rock and oil treatment—Manly Construction Co.	81,536.30
Proj. 863, Road 56, Columbia county—Rock base with rock and oil treatment—L. M. Gray.....	27,344.10
Proj. 866, Road 17, Hillsborough county—Asphalt block—Cone Bros. Const. Co.	32,351.90
Proj. 65, Road 5, Bridge over Alafia river—Fred D. Beasley & Co.	94,414.95
Proj. 68-A-1, Road 4, Palm Beach Canal Bridge—Powell Bros. (without bascule)	56,399.05
Basculer span for Proj. 68-A-1—Nashville Bridge Co. (asphaltic plank)	24,727.00
Proj. 68-A-2, Road 4, Himmarshee Canal Bridge—Foley & Milane	25,185.30
Proj. 68-A-3, Road 4, Tarpon River Bridge—Foley & Milane	22,054.00

REJECTION OF BIDS—PROJECT 715-B—NEW RIVER BRIDGE—ROAD 28

On motion of Mr. Shands, seconded by Mr. Perkins, the following resolution was adopted:

Project 63-B-1—Road 4—Bridge Over Hillsborough Canal.

Dudley-Murphy Const. Co.	West Palm Beach	Without bascule	\$ 56,563.00
W. S. Lockman Const. Co.	West Palm Beach	Without bascule	52,301.71
Powell Bros.	Ft. Lauderdale	Without bascule	54,759.80
Wm. G. Just Eng. Co.	Miami	Without bascule	56,079.80
E. F. Powers Const. Co.	West Palm Beach	Without bascule	55,999.55

Separate Bids on Bascule Span.

W. S. Lockman Const. Co.	West Palm Beach	Asphaltic floor	\$ 35,000.00
Nashville Bridge Co.	Nashville	Asphaltic floor	28,670.00
American Bascule Corp.	Pensacola	Asphaltic floor	30,987.00
Tampa Shipbuilding Eng. Co.	Tampa	Asphaltic floor	37,879.00
Nashville Bridge Co.	Nashville	Concrete floor	33,812.00
American Bascule Corp.	Pensacola	Concrete floor	39,749.00

Project 63-B-2—Road 4—Pompano Canal Bridge.

W. S. Lockman Const. Co.	West Palm Beach	\$ 47,979.85
Powell Bros.	Ft. Lauderdale	49,028.65
E. F. Powers Const. Co.	West Palm Beach	54,247.75
Murphy Const. Co.	Orlando	46,096.95
Wm. G. Just Eng. Co.	Miami	47,227.60

Project 63-B-3—Road 4—Middle River Bridge.

Wm. G. Just Eng. Co.	Miami	\$ 34,924.90
E. F. Powers Const. Co.	West Palm Beach	42,562.60
W. S. Lockman Const. Co.	West Palm Beach	35,425.40
Murphy Const. Co.	Orlando	34,570.30
Everglades Const. Co.	Hialeah	36,720.62

Project 721-B—Road 3—Rice Creek Bridge.

Atlantic Bridge Co.	Greensboro, N. C.	\$121,383.80
Austin Bros. Br. Co.	Atlanta	109,383.10
The Champion Br. Co.	Ft. Lauderdale	119,644.45
C. T. Dawkins, Inc.	Tampa	130,990.40
Roberts Supply Co.	Tampa	125,829.30
E. F. Powers Const. Co.	West Palm Beach	129,694.16

Project 835—Road 5—Withlacoochee River Bridge.

Sahlman & Hogan Const. Co.	Fernandina	\$ 24,409.40
Atlantic Dredging & Const. Co.	Auburndale	34,255.70
W. S. Lockman Const. Co.	West Palm Beach	29,017.00
C. T. Dawkins, Inc.	Tampa	27,559.76
Florida Br. & Const. Co.	Orlando	29,451.70
Wm. G. Just Eng. Co.	Miami	34,719.20
Frost Const. Co.	Tampa	32,054.10

SALE OF SURPLUS WAR MATERIALS

The Department also pursuant to due advertisement for this date received bids for the purchase of surplus materials at the Equipment Division at Gainesville, and the following bids were received:

M. Wolfson & Company, Jacksonville	\$6,280.00
Florida Iron and Metal Co., Jacksonville	3,156.06
Frank Wexler, Palatka	2,275.00
Atlantic Iron & Metal Co., Jacksonville	5,250.00
George W. Trout, Jacksonville	4,565.00
Goldberg Bros. Surplus Stocks Co., Jacksonville....	3,750.00
I. Berner and I. Salsbury, Tampa	2,578.00

BE IT RESOLVED: That the Department do reject all bids received on yesterday for the construction of Project 715-B, bridge over New River, on Road 28 and between Bradford and Union counties.

BE IT FURTHER RESOLVED: That the Department do readvertise for bids for the construction of a timber bridge.

LIME ROCK SPECIFICATIONS

Mr. Adam Lewis, representing Marianna Lime Products Company, appeared before the Department and requested that the specifications for rock be so revised as to permit the use of his product. Mr. Lewis was told that his request would be taken under consideration by the Department.

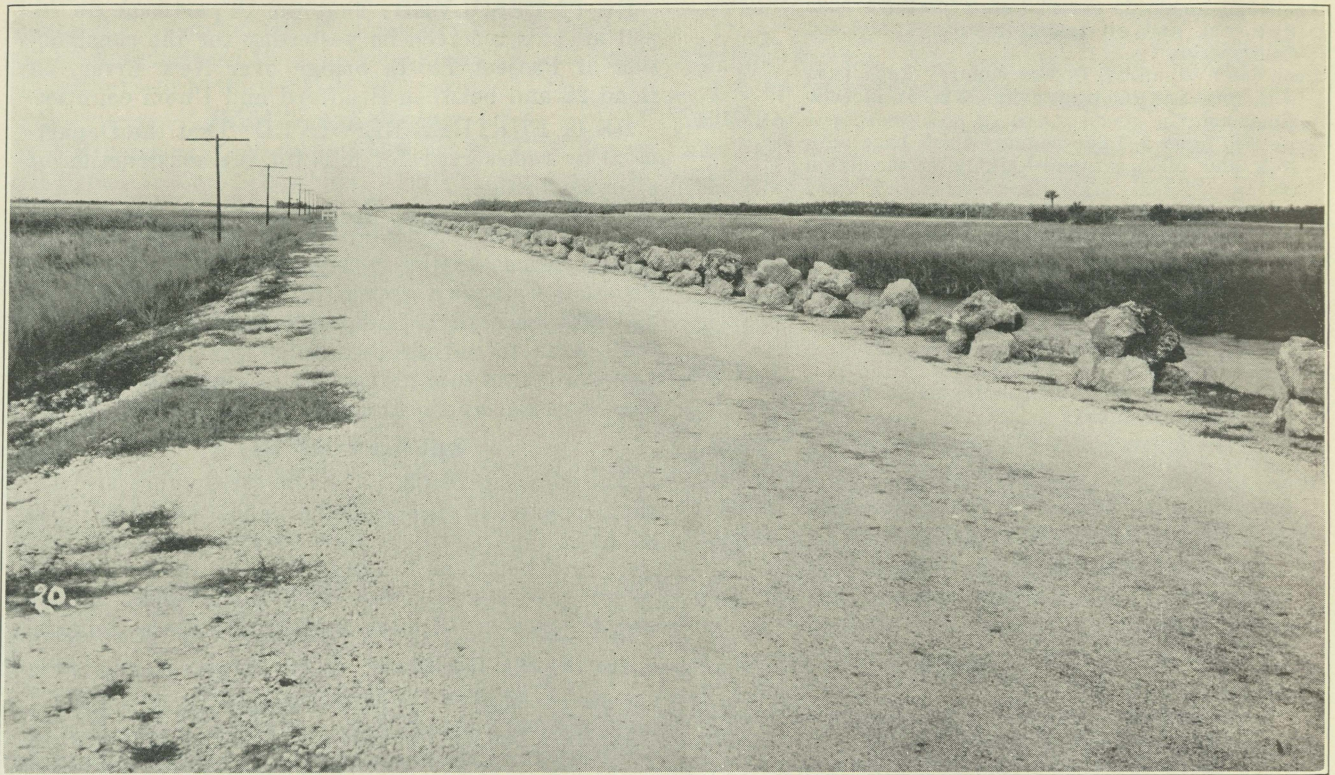
RECEIPT OF BIDS

The hour of 10:00 o'clock A. M. having arrived, the Department proceeded to open and read bids submitted pursuant to due advertisement for this date and hour, on the projects hereinafter set out, which projects, together with the bidders thereon and the amount of their several bids, are as follows:

On motion of Mr. Shands, seconded by Mr. Perkins, the following resolution was adopted.

BE IT RESOLVED: That the bid of M. Wolfson & Company, in the sum of \$6,280.00, for the purchase of surplus materials at the Equipment Division at Gainesville, be and the same is hereby accepted.

BE IT FURTHER RESOLVED: That the purchaser shall begin the removal of said goods within thirty days and shall complete the removal thereof within one hundred and twenty days, the removal



Proj. 669-V, Road 27, Collier County.

of said goods to be under the supervision of the Superintendent of Equipment.

LIME ROCK SPECIFICATIONS

The Department resumed consideration of the matter of the revision of the specifications so as to permit the use of lime rock found in West Florida.

On motion of Mr. Shands, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED: That the specifications for rock to be used in West Florida be placed temporarily at a calcium and magnesia content of 90 and that the matter of the revision of the specifications be deferred until the next meeting.

Taylor County—Road 19

Mr. W. L. Weaver, member of the Board of County Commissioners of Taylor county, appeared before the Department, to ascertain if the Department would as soon have the Taylor county funds applicable to the construction of Road 19 from Perry north and let contract for construction, instead of having Taylor county use its equipment and said funds as heretofore agreed. He was told that this plan would be satisfactory to the Department.

Mr. Weaver also inquired if the Department still expected Taylor county to make its contribution of \$7,500.00 per mile on the construction of said road. He was informed that this is the contract between Taylor county and the State Road Department, and that the Department will, of course, expect Taylor county to perform its agreement.

Advertising Markers on State Roads

Mr. H. K. Bryson, of Fayetteville, Tenn., appeared before the Department with a proposal to place markers on State roads, said markers to carry the direction and distance to the next town, together

with a small amount of advertising. Mr. Bryson was informed that it is the policy of the Department not to permit the placing of advertising signs on the right-of-way of State roads.

Resignation of State Highway Engineer

Mr. J. L. Cresap, State Highway Engineer, submitted to the Department his resignation as such, effective September 1st, 1929.

On motion of Mr. Perkins, seconded by Mr. Graham, his resignation was accepted.

Election of State Highway Engineer

On motion of Mr. Perkins, seconded by Mr. Graham, Mr. B. M. Duncan was unanimously elected State Highway Engineer, succeeding J. L. Cresap, resigned, and effective September 1st, 1929.

On motion of Mr. Shands, seconded by Mr. Graham, the Department was adjourned until two-thirty o'clock P. M.

AFTERNOON SESSION—2:30 O'CLOCK

Present as at morning session.

AWARD OF CONTRACTS

On motion of Mr. Shands, seconded by Mr. Graham, the following resolution was adopted:

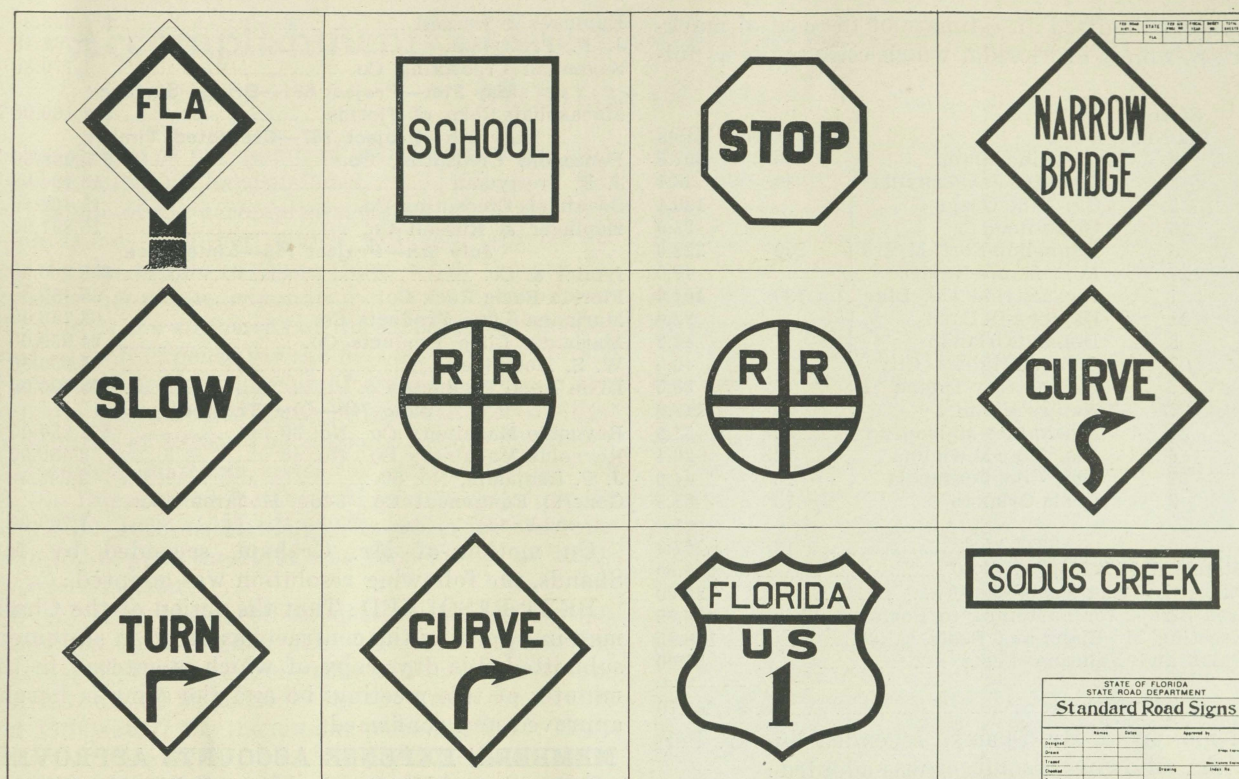
WHEREAS, This Department, after due advertisement, has this day received bids for the construction of the projects hereinafter designated, and

WHEREAS, The firms and individuals hereinafter named are and have been determined to be the lowest responsible bidders for the respective contracts hereinafter named; Now, therefore,

BE IT RESOLVED: That contracts for the construction of the projects hereinafter listed be and they are hereby awarded as follows:

Proj. 63-B-1, Road 4, Hillsborough Canal Bridge

—W. S. Lockman Const. Co. (bridge only).... \$ 52,301.71



Standard Signs in Use on Florida Roads.

Nashville Bridge Co., bascule span (asphaltic plank)	\$ 28,670.00
Proj. 63-B-2, Road 4, Pompano Canal Bridge—Murphy Construction Co.	46,096.95
Proj. 63-B-3, Road 4, Middle River Bridge—Murphy Construction Co.	34,570.30
Proj. 721-B, Road 3, Rice Creek Bridge—Austin Bros. Bridge Co.	109,383.10
Proj. 835, Road 5, Withlacoochee River Bridge—Sahlman & Hogan Const. Co.	24,409.40

Suwannee County—Roads 5-A and 50

A delegation from Suwannee county, consisting of Governor Cary A. Hardee, Senator S. A. Hinely and Messrs. E. S. Conners, P. B. Cannon, J. J. Dempsey, J. T. Clark, J. L. Blackwell, W. L. Rogers, T. J. Clements, W. H. Lyle and J. W. Bryson, appeared before the Department and requested the return to the Board of Commissioners of the balance of Suwannee county funds over and above the amount of money necessary for the construction of Roads 5-A and 50 in said county.

On motion of Mr. Shands, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED: That the Chairman be and he is hereby authorized to pay over to the County Commissioners of Suwannee county the balance of the county funds remaining after the payment of the funds necessary for the construction of Roads 5-A and 50, such funds, however, not to be released until final estimates have been paid to contractors covering the work on said roads.

Flagler County—Ocean Shore Boulevard

Mr. George Moody of Flagler county appeared before the Department and requested that maintenance crews be placed on 16 miles of the Ocean Shore Boulevard in Flagler county. Mr. Moody was informed that the Department can not render any assistance during the present year, at least.

Machine for Painting Center Stripe

Mr. T. A. Kirton, of Jacksonville, requested the Department to permit him to demonstrate his machine for painting center stripe on State roads. The Department agreed that they would meet Mr. Kirton for such a demonstration tomorrow morning.

Road 27—Drainage in Dade Drainage District

Mr. Graham, member of the Department, requested that the engineer of the Department collaborate with the Dade county engineer during this rainy season in taking record to establish the effect of the Tamiami Trail in raising the water level in the Dade Drainage District. The request was granted, with directions to the Engineering Department to have an engineer perform this service.

Miami-to-Okeechobee Highway

Resolutions of the Master Printer's Association of Miami, City Commission of the City of Coral Gables, Miami Beach Realty Board, Greater Miami Manufacturers' Association, Civitan Club of Miami, Miami Beach Chamber of Commerce, Miami Junior Chamber of Commerce, Advertising Club of Miami, City Commission of the City of Miami, City Council of the City of Miami Beach, Miami Realty Board, and the Coconut Grove Business Men's Club, requesting the Road Department to survey, select and designate the route along the east bank of the Miami Canal from Miami to Lake Okeechobee as the official route of State Road 26, and to request the Legislature to place same on the preferential list, were read. No action was taken because the Legislature at its 1929 session dealt with the matter of the location of State Road 26.

Federal Highway Route Markers

Pursuant to resolution adopted at the last meeting of the Department, J. L. Cresap, State Highway

Engineer, submitted an estimate of the cost of marking U. S. routes in Florida, which estimate is as follows:

U. S. No.	State Rd. No.		Markers	Miles
1	4	Ga. Line-Miami	00	397.5
17	3	Ga. Line-Jacksonville	30	33.1
41	2	Ga. Line-Ocala		130.1
	16	Ocala-Road 5		22.0
	5	Dunnellon-Fort Myers	200	228.0
	27	Fort Myers-Naples		40.0
90	1	Jacksonville-Ala. Line	180	401.6
92	21	Daytona-DeLand		22.0
	3	DeLand-Orlando		42.2
	2	Orlando-Haines City	120	40.5
	17	Haines City-Tampa		58.5
94	27	Naples-Miami	50	112.0
192	24	Kissimmee-Melbourne	30	54.5
231	6	Ala. Line-Marianna	12	20.4
331	7	Ala. Line-Pensacola	16	44.0
441	2	Ocala-Orlando	75	81.5

TOTALS	713	1,727.9
713 Standard 16"x16½" @ \$1.50		\$ 969.50
200 4x4x6' Dressed Posts @ .40		80.00
513 Iron Straps for Fastening to Posts @ .15		76.95
Erecting 713 Signs and Posts @ .25		188.25
Paint and Painting Posts		50.00

Total Cost \$1,364.70

On motion of Mr. Shands, seconded by Mr. Perkins, the following resolution was adopted:

BE IT RESOLVED: That this Department do proceed to purchase and install U. S. route markers on the routes named and indicated on the list this day submitted by the State Highway Engineer, at an estimated cost of \$1,364.70.

BE IT FURTHER RESOLVED: That the Chairman be and he is hereby requested to apply to the U. S. Bureau of Public Roads for Federal assistance in so marking these routes.

Road 41—Claim of Mrs. Virginia White

The attorney for the Department reported for himself and Mr. Bayliss, member of the Department, as directed by resolution adopted at the last meeting, stating that he had taken up with Mrs. Virginia White the matter of the least sum which she would accept in full settlement for her claim for damages on account of an accident to herself, daughter and car on Road 41 on the night of April 3rd, and that Mrs. White had indicated that she would accept the sum of \$600.00 in full settlement.

On motion of Mr. Perkins, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED: That the Chairman be and he is hereby authorized to pay to Mrs. Virginia White the sum of \$600.00, which payment shall be in full satisfaction and discharge of all claims against the State and/or the Department on account of the accident to herself, daughter and car on State Road 41, on the night of April 3rd.

AWARD OF CONTRACTS APPROVED

The Chairman submitted to the Department a list of bids received since the last meeting of the Department, and stated that he had awarded contract in each instance to the bidder designated by the cross-mark X. This list of bids is in the words and figures as follows, to wit:

BIDS SINCE MAY 15th AND 16th

May 31st—Project 500-C—Creosoted Timber
Pensacola Creosoting Company \$ 1,730.02 X

Eppinger & Russell \$ 1,933.90
J. F. Prettyman 1,761.48
Savannah Creosoting Co. 1,770.80

May 31st—Project 681—Bridge Surface

Macasphalt Corp. of Florida \$11,160.00 X

July 5th—Project 787—Creosoted Timber

Pensacola Creosoting Co. \$15,088.80 X
J. F. Prettyman 18,104.88
Savannah Creosoting Co. 15,402.16
Eppinger & Russell Co. 15,891.96

July 5th—Project 743—Lime Rock

Lanier & Co. \$58,800.00
Florida Basic Rock Co. 65,450.00 X
Marianna Lime Products Co. 63,700.00
Marianna Lime Products Co. 61,950.00
W. S. Hotchkiss 68,950.00
Dixie Lime Products Co. 135,100.00

June 7th—One Tractor

Reynolds Machinery Co., No. 30 \$ 2,850.00 X
Reynolds Machinery Co., No. 40 3,850.00
J. P. Benjamin, No. 50 3,595.50
General Equipment Co., 5-ton Monarch (second-hand) 1,700.00

On motion of Mr. Graham, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED: That the action of the Chairman in awarding the contracts as listed in statement submitted this day, copy of which is entered in the minutes of this meeting, be and the same is hereby approved and confirmed.

MEMBERS' EXPENSE ACCOUNTS APPROVED

On motion of Mr. Bentley, seconded by Mr. Shands, the members' expense accounts were approved, as follows:

G. D. Perkins \$156.05
Ernest R. Graham 192.05
W. A. Shands 75.15
J. Harvey Bayliss 41.40
J. Harvey Bayliss 44.40
Robert W. Bentley 51.05

On motion of Mr. Graham, seconded by Mr. Shands, the Department was adjourned.

MUST OUR FINE HIGHWAYS BE BORDERED BY BEWILDERING SIGNS, TAWDRY BUILDINGS, WEEDS, WASTE PAPER, OLD CANS?

An Appeal Made Over the Radio June 3

By RAY LYMAN WILBUR,
Secretary of the Interior.

When Daniel Boone made his celebrated trip out to the wilds of Kentucky he must have gone through a magnificent forest as he followed the game and Indian trails. He traveled at a rate slow enough to enjoy the green fields and the clear streams, the beautiful animals and the flashing birds, the bright flowers and the gay butterflies. We can understand why he brought back those glowing tales which stimulated the great migration over the mountains to settle the Ohio river country.

Now a traveler speeds along on the railroad or on a fine highway and often is more impressed by the ugly back yards, the smoke-stained shops and factories, the turbid rivers and the cheap frame we have built around our highways than by the beauty of the landscape. The great forest is gone. In some places we are trying to get it back again. But nearly everywhere there could be beauty of plant and tree and attractive homes and fertile farms. In many places there is great charm, but the buildings and other things near the highways block the vision.

(Turn to page 21.)

Accomplishments of the Department During First Six Months of 1929

Completion of one hundred and fifty-two and one-quarter miles of hardsurfaced roads thus far this year is one of the accomplishments of the State Road Department. Another, which will have special appeal to the people in these times when the cry for economy in public expenditures is being made on all sides, is the statement of the Department that its total payroll expense for the first six months of 1929 is approximately a quarter of a million dollars less than the payroll total of the Department for the first six months of 1928. The statement, made by Robert W. Bentley, chairman, gives the total of all payrolls for the Department for the half-year period January 1-June 30, 1928, as \$1,125,959.72, while for the same period this year the total was \$885,455.10, or \$240,504.62 reduction.

Every item of payroll expense shows a reduction, according to the chairman. General engineering (exclusive of office engineering and testing division) salaries totaled \$305,329.65 for the half-year of 1928 and \$186,356.07 for the similar period of 1929. Maintenance payrolls for the 1928 period totaled \$436,438.94, while for the 1929 period the cost was \$361,911.62. Miscellaneous payrolls were for the six months of last year \$190,181.47, and for this year \$171,707.15.

Commenting on the maintenance payroll, Mr. Bentley said:

"This reduction of \$74,527.32, or more than twelve thousand dollars per month in the payroll cost of road maintenance or upkeep, is especially significant when one takes into consideration that during the first half of this year the Department was maintaining 3,517.28 miles of highway as compared with 2,784.54 last year, an increase of 732.74 miles in 1929. This saving in maintenance costs has been achieved without reducing the quality of maintenance but by

giving the men more work to do and seeing to it that the gang foremen work along with the men. Also the use of more machinery and less hand labor is a factor toward reduced costs, and we are gradually introducing mowing machines of an approved type for cutting grass and weeds on the shoulders of the roads and doing away with some hand labor.

"Under the head of reconstruction of worn roads, the figures show 94.8 miles reconstructed during the first half of last year and 102.73 miles during the first six months of 1929.

"Storm or flood damage—principally in northwest Florida—was greater this year than last. Restoration of storm-damaged roads thus far in 1929 has cost \$79,349.66, as against \$28,449.33 last year and the work is not yet completed."

Turning to the new construction side of the Department's operations, the chairman said:

"The Department has completed the hardsurfacing of 152.24 miles of roads since January 1; completed grading of 138.72 miles; constructed 2,400 feet of bridges.

"Since the first of the year the Department has placed under contract for hardsurfacing 172.15 miles; under contract for grading, 67.79 miles. Bridges placed under contract total 2,840.97 feet, of which 2,765.97 feet are of concrete type and 75 feet of wooden bridge. Sand-clay highway placed under contract totals 31.63 miles.

"The amount of money involved in contracts let thus far in 1929 is \$3,783,106.37."

Recently, as a measure of economy, the number of divisions was reduced from seven to five. "It was the opinion of the Board that we could operate as effectively with five divisions as with seven, and this reduction is effecting a considerable annual saving in operating costs," said Mr. Bentley.

Senate Memorial No. 18

Adopted by the Legislature of 1929 Relating to Gulf Coast Highway.

A Memorial to the Congress of the United States Requesting that Legislation be Enacted by said Congress to Place the Uncompleted Portions of the Gulf Coast Highway in the Federal Seven Per Cent System of Highways.

WHEREAS, The Gulf Coast Highway, or State Roads Nos. 10 and 15, traverses the Gulf Coast of the State of Florida, touching and connecting the deep water ports of said coast; and,

WHEREAS, By reason of its location it is a highway of outstanding importance to the nation as a military road, and in the event of war would furnish access to all the deep water ports of the Gulf Coast of Florida, so as to furnish ports of embarkation, mobilization and source of supply; and,

WHEREAS, The Federal Seven Per Cent System as it relates to Florida does not include the said highway; Now, therefore,

BE IT RESOLVED by the Legislature of the State of Florida: That the Congress of the United States be and it is hereby memorialized and earnestly solicited to take such steps and enact such legislation as will include in the Federal Seven Per Cent System of Highways in this State that road popularly known as the Gulf Coast Highway, extending from St. Petersburg in Pinellas County to Pensacola in Escambia County, following the Gulf Coast of said State, and along the route of State Roads Ten and Fifteen, and such other and further legislation as may be necessary to authorize and direct the United States Bureau of Public Roads to participate in the construction of the uncompleted portions of said highway.

BE IT FURTHER RESOLVED: That a copy of this Memorial be transmitted by the Secretary of State, and under the Great Seal of the State, to the

Secretary of War, with the request that he approve and concur in the request herein made.

BE IT FURTHER RESOLVED: That copies of this Memorial under the Great Seal of the State, be transmitted by the Secretary of State to the Speaker of the House of Representatives of Congress, to the Vice-President of the United States as President of the United States Senate, and to each of the members of the Senate and House of Representatives from Florida, as members of the said Congress.

BE IT FURTHER RESOLVED: That a map of the State of Florida, showing the location of Roads Nos. 10 and 15, and indicating the uncompleted sections of these roads, and also showing the deep water ports reached by the Gulf Coast Highway, accompany this Memorial.

UNIFORM TRAFFIC CODE URGED FOR THE AMERICAS

Uniform traffic regulations for the nations and cities of the Western Hemisphere will be considered at the Second Pan-American Congress of Highways, to be held at Rio de Janeiro during August.

Discussion of this subject has been requested by the governing board of the Pan-American Union. This action is taken as recognition by the governing board of the growing importance of automobile travel within, as well as between, the several countries of North, Central and South America, particularly in view of the expanding interest in highway construction and the demand for the early realization of a Pan-American Highway connecting the several nations.

The August meeting will discuss also a preliminary draft of proposed Pan-American conventions on automotive traffic, submitted by the Pan-American Confederation for Highway Education. This draft is based on broad general principles to which it is felt the prospective signatories can adhere. It recognizes that each nation has exclusive control over the use of its own highways, but agrees to their international use under the limitations specified. Its requirements would call for registration of all vehicles entitled to international reciprocity, registration of vehicles at point of entry (but no bond), subjection of all vehicles and drivers to the traffic regulations of the states in which they are traveling, and the uniformity of danger and direction signs as between the adhering nations. Where differences exist in present practice, the Confederation accepted the customs of the majority.

An analysis of the comparative study of the International and United States codes reveals few points of disagreement, and discloses many instances of unanimity. The codes are in general agreement on the requirements for safe driving, for the compulsory registrations of vehicles and operators, on a minimum age for vehicle operators, on restrictions as to size of vehicles, and equipment required, such as brake systems, horns, mirrors and lights.

One point of disagreement, however, pertains to pedestrians' right-of-way. The European or International code gives the vehicle the right-of-way, while the United States code specifically provides that except at policed intersections, the vehicle shall

yield the right-of-way to the pedestrians. In the United States code, the rule of the road is to the right, while the International code permits a national choice. The danger and direction signs are not in entire harmony, but this is a phase of the situation which it is thought will lend itself to adjustment.—The American City.

SE LANCE

Were you ever in a hurry
And got caught in all your flurry,
Behind a casual driver in the middle of the street?
You can't pass him—surely not!
For the law says you have got
To stay upon the right-hand side the beat.

The road hog is a bum
That takes up all the room,
But it's only for a moment—then he's gone.
But the duffer throttled down
In the center of the town,
Is a thing we shouldn't tolerate for long.

The bird that backs into you from the parkways on
the side,
And crumples your new fenders that have been your
joy and pride,
Is not half so much a nuisance
As the boob who has a flair
For idling down the center of the main thoroughfare.

The lad that drives at sixty makes your heart go
pit-a-pat,
And you wonder where the ditch is he's going to
end up at;
But he's not half a penny to the man you often meet,
Who goes nonchalantly ambling down the center of
the street.

Get over there you lazy lout,
And stay where you belong!
The center of the street is for the passing throng,
Who have a place to go to and don't want to take
all day.
So get over on the right-hand side,
That's where you ought to stay.

—Unknown.

Up to the Neck

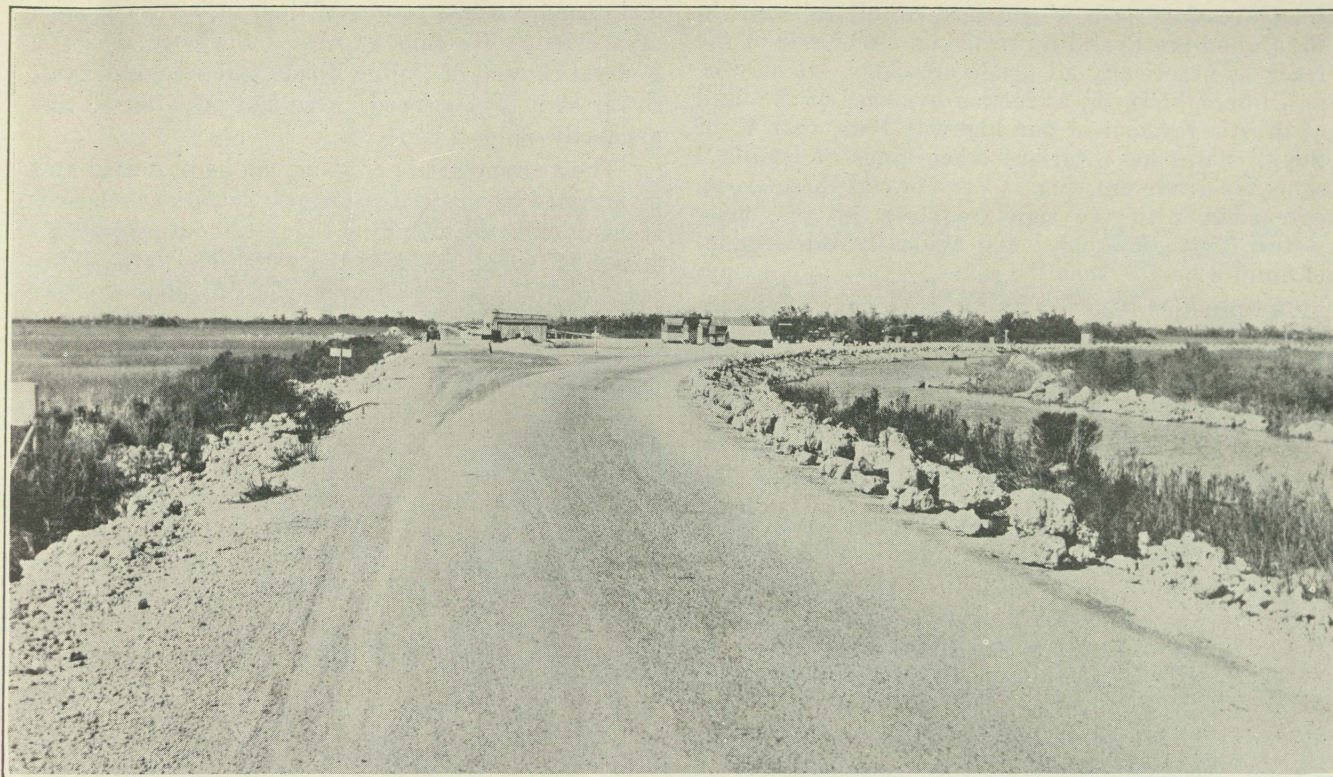
The teacher said to her class: "Words ending in 'ous' mean full of; as joyous means full of joy and vigorous means full of vigor. Now give an example of such a word."

Tommy raised his hand and said: "Pious."—Herald of Gospel Liberty.

But how do they account for the fact that there were no doctors to keep away until the first apple was eaten?—Portland Express.

Scattered throughout our country are thousands of statues erected to successful men who never learned to dance.—Louisville Times.

And there are a number of living people able to find their way about, who don't and can't play bridge.—Kentucky Highways.



Projs. 669-D and E, Road 27, Dade County.

Protecting Necessary Grade Crossings by Proper Signal Devices

WHILE the prohibition of additional railroad grade crossings and the continued elimination of existing dangerous crossings are of fundamental importance, it is just as vital that the protection of all necessary crossings be given the same careful study as other dangerous points on the public highways, contends R. H. Ford, Assistant Chief Engineer of the Chicago, Rock Island and Pacific Railway Co.

This opinion and a summary disclosing that the number of crossings protected by gates or watchmen is decreasing while those protected by signal devices are increasing, were given by Mr. Ford in a paper read recently at the Fifteenth Annual Conference on Highway Engineering, held at the University of Michigan.

The summary of various types of protection which Mr. Ford presented during his discussion of the general problem of marking grade crossings, is based on data compiled by the Interstate Commerce Commission. It discloses that 5,747 crossings last year were protected by gates; 7,302 by watchmen; 16,627 by signals; and 204,742 by fixed signs. This gave a total of 234,418 protected crossings, while 3,426 were unprotected, bringing the grand total to nearly 238,000, an increase of 1,561 grade crossings during last year.

Urges Automatic Signals

Wherever applicable, the automatic signal or "24-hour mechanical flagman," should be utilized in the interest of uniformity and safety, Mr. Ford believes. Its value as a protective unit is being proved by the

very fact that it is steadily replacing flagmen and manually operated gates as the most reliable device available, he points out.

"Grade crossing protection to be efficient and satisfactory, requires that there be two signals at each crossing, the home signal, which should be placed sufficiently close to the tracks to prevent pocketing of an automobile between the signal and the rails, and the distant or advance warning signal or sign. This latter sign should be on the side of the highway, in conformity with the regular practice of state highway authorities, and placed at a sufficient distance from the crossing to enable a driver to know of his approach to a railway grade crossing. In this manner, he would be prepared to stop on the flash of the signal warning lights or the movement of the wigwag which gives notice of the approach of a train."

Under usual conditions, Mr. Ford states, these lights are regulated so as to start flashing 20 seconds before the train reaches the crossing. This is arranged through an electrical contact between the advancing locomotive and the track circuits. For a train approaching at the speed of 60 miles an hour, this is rated at approximately 1,760 feet along the track from the crossing.

Home Signal in Center of Highway.

Where practical, the home signal should be placed in the center of the improved highway, which should be widened sufficiently for the purpose, both on the approaches and at the crossing, the railroad engineer declares.

"The railway sawbuck sign with the words 'Rail-

road Crossing' is now standard on all railways in the United States and is erected on either side of the track at practically all grade crossings. It may be noted here, however, as further evidence of the need of drastic revision of our highway laws, that 12 of the 48 states have various other kinds of legalized signs for grade crossings. Very few of these are in agreement with the signs required by the other states, the regulations being evidently the product of uninformed persons."

The practice of black and white striping for protective devices is now almost universal and is recommended by the Grade Crossing Committee of the American Railway Engineering Association, Mr. Ford states in his paper. He says this organization also recommends that the number of tracks to be crossed be suitably marked by a numeral on the standard sawbuck crossing sign.

Favors Striping on Pavement

It is Mr. Ford's opinion that the practice of pavement marking by black and white stripes opposite the advanced warning sign, while not so general, is most desirable. In addition, he favors carrying the black traffic line used on the pavement to divide traffic right up to the railroad crossing. This line, he adds, has been one of the best of the contributory safety measures at grade crossings, and its use, as such, has been endorsed by the Hoover National Conference on Street and Highway Safety. He continues:

"It is indeed unfortunate that our highway and civic authorities do not or cannot find some means for coöperating with the railroads in the removal of all signs and other devices of an advertising character for the entire distance between the advance warning signs on both sides of the track. These billboards or signs constitute one of the principal contributing causes of accidents at grade crossings. They often obstruct the vision of the engineer on approaching trains and are distracting and often confusing to the auto driver."

Determination of those crossings which can be adequately protected by automatic devices, either permanently or until the time when they may be relocated, calls for an impartial investigation by a competent authority, free from local influences or the restrictive effects of preconceived long-distance rulings, the speaker remarked. Many of the crossings that are now urged for separation and where separations are not economically justified, can be adequately protected by modern signaling and protective devices, he believes.

Railroads Best Judge of Proper Devices

From the very nature of the problem, Mr. Ford insists that the railroads are in a better position to judge of the best form of protection to their tracks, partly because they are required to assume the burden of the responsibility in case of accident. In this connection, he feels that the attitude of some of the Federal and state authorities is too restrictive. He does not believe it is conducive to coöperative action for the Federal Department of Highways, or the state highway commissions, to insist arbitrarily upon the type, character and location of protection, when not assuming responsibility with respect to cost,

maintenance or the results of their insistence, in case of accident. He thus expresses the hope that the Federal Bureau of Public Roads will recognize that, so far as it is concerned, these matters after all are primarily of local concern.

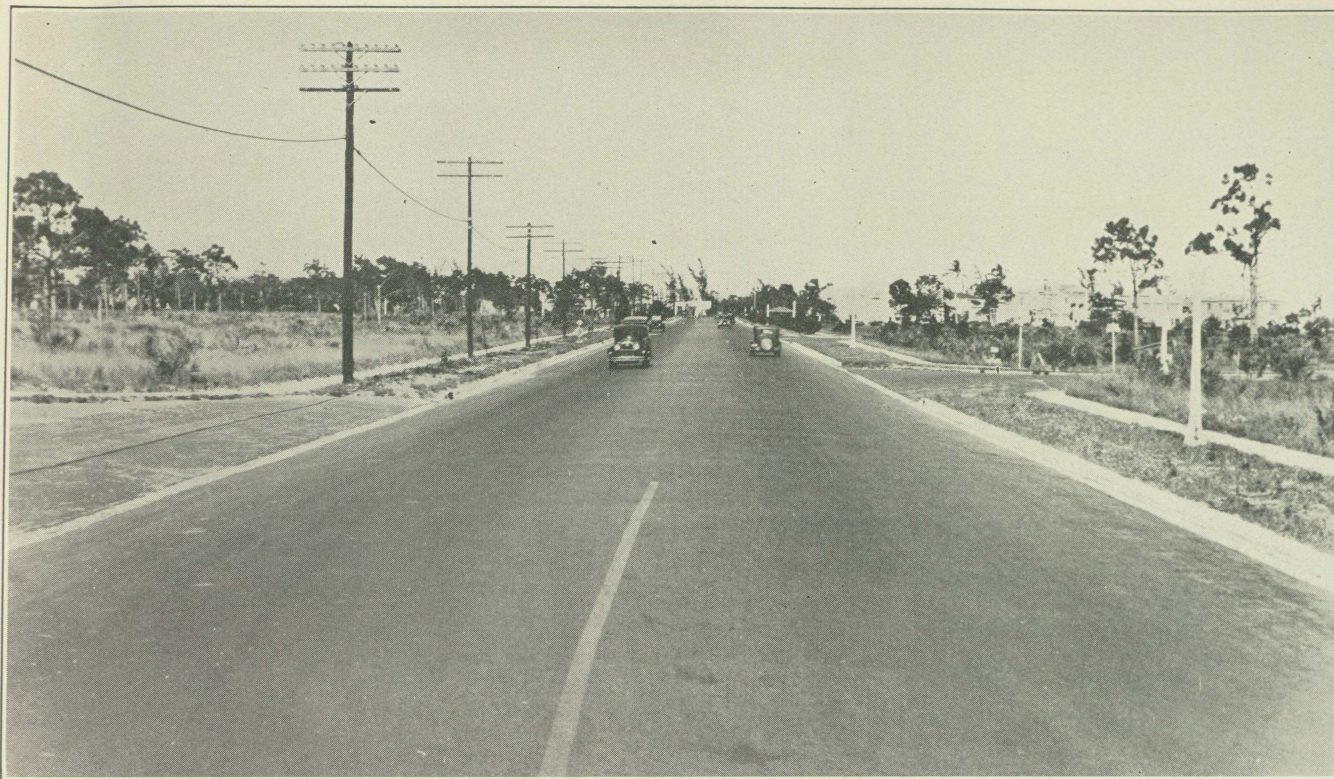
"The average grade crossing can be protected and maintained by modern automatic devices at relatively small expense, including the initial outlay for construction, which includes the widening of the pavement in the same manner as is now being done at sharp curves and highway intersections. The effect on the driver is as much psychological as it is beneficial in other ways. In like manner, the railroad crossing should be widened to meet the improved highway, and the cost of construction and maintenance thereafter should then be apportioned on some mutually satisfactory basis."

Mr. Ford subscribes to the suggestion of E. W. James of the Bureau of Public Roads, that the cost of installing protective devices be shared between the states and the railways and would apply that policy to all unprotected grade crossings.—The American City.

ROMANCE AND BUSINESS

Meeting at St. Augustine of the Old Spanish Trail workers has brought forth many romantic stories concerning this particularly important Southern route across the United States, and it is a far way between St. Augustine, Florida, and San Diego, California, and many are the stories which can be told and retold concerning the historic points between the two mentioned cities. Rich in romance and of educational interest, this route favors always of those things which bring up a far-distant past, and yet, contemplated from the very emphatic present moment, no hard-surfaced highway across the continent is superior in its attractiveness for usage of the most practical character. It is the shortest route between the two great oceans in the United States and in addition is one which can be utilized in comfort all seasons of the year. It passes through the richest agricultural belt of the South, and its scenic properties bring to the vision some of the most beautiful sections of the nation.

Texans have every reason to strive for the filling of gaps not now hard-surfaced, for the reason that this is to become one among the famed highways of the nation, and the route across the commonwealth is almost one-half the entire distance, far more than one-third. In addition, it extends through South Texas, not so well known to the people of the North and East as are the sections in the state farther to north of the Old Spanish Trail. Beaumont, Houston, Austin, San Antonio, the smaller cities between the last two mentioned, and then El Paso, where the traveler would go on highways connected from those which come from the northern section of the state. Such travel brings immediate business to the state, but what is of still more importance, it extends over a vast section only partially developed, and the visitor with an eye toward business will see many points to which he may afterwards devote serious attention.—Texas Highway Bulletin.



Proj. 41, Road 4, Dade County.

7,000 Miles of Federal Aid Highways Improved Last Year

DURING the fiscal year 1929, the Federal Government coöperated with the states in the improvement of 7,022 miles of Federal Aid highways, bringing the total mileage of the system improved with Federal aid to 78,096, according to figures of the Bureau of Public Roads of the United States Department of Agriculture. The year's mileage was improved in the 48 states and Hawaii by state highway departments working in coöperation with the Federal bureau. There are approximately 188,000 miles of main interstate and intercounty highways in the Federal aid system, of which the above mileage and approximately an equal mileage built by the states without Federal assistance is now improved.

The 7,022 miles improved include 1,056 miles of graded and drained earth roads, 563 miles of sand-clay, 1,293 miles of gravel roads, 189 miles of water-bound macadam, 728 miles of bituminous macadam

and bituminous concrete pavements, 3,101 miles of Portland cement concrete pavement, and 48 miles paved with vitrified brick. Forty-four miles of bridges and approaches were also constructed.

In addition to the improved mileage, at the end of the year there were under construction with Federal aid 9,526 miles, 8,358 of which were undergoing initial improvement, and 1,168 were being given a higher type of surface than was provided in original construction. The estimated cost of the mileage under construction is \$238,158,495, which includes Federal funds in the sum of \$96,500,347.

At the end of the year there were also approved for initial construction, 1,833 miles of highways and a further 1,065 miles to receive a higher type of surface. The total cost of the approved mileage is estimated at \$61,500,674 to which Federal funds in the sum of \$24,137,546 have been allotted.

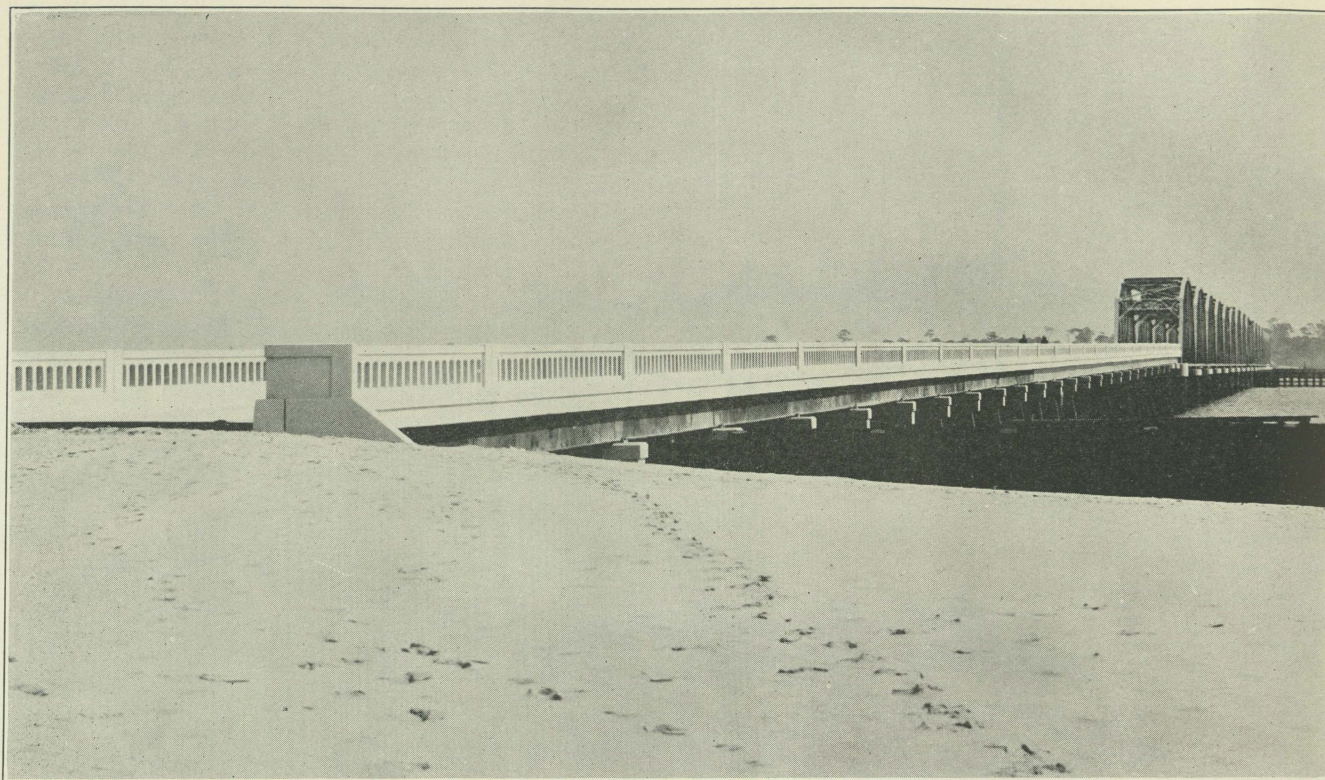
FLORIDA BUILDING SOLIDLY

Florida is now building solidly, says B. C. Forbes, in a recent issue of Forbes Magazine. In a talk before the Tampa Chamber of Commerce on March 19, he said: It would be much safer to buy well-selected Florida real estate than to buy the popular stocks on the New York Stock Exchange. Within a week the stocks lost more than a billion dollars. On the following day they collapsed quite as badly before the banks stemmed the debacle. You are not likely

to see anything of the kind happen in Florida. There values have touched the bottom.

Much property positively is on the bargain counter. The next movement in that tropical state is bound to be upward. Some recovery has already set in. It is significant that more tourists than ever before have wintered in certain cities.

Some of the shrewdest capitalists in America have been investing in Florida within the last 12 months. They are much more likely, in my opinion, to make money than those who have clamored for boomed speculative stocks.—The New Era.



Proj. 681, Road 10, Bay County. Approach to West Bay Bridge.

Faster Cars Emphasize Importance of Safer Highways

Most automobiles now being made have a speed of at least 50 miles an hour.

Car speeds and the great volume of traffic now thrown on the roads are exerting a beneficial influence on highway design and construction. In the early days of rural pavement laying, for instance, many surfaces were built to a width of no more than 16 feet, scarcely room enough for a load of hay and a car. Later, an 18-foot pavement width was adopted by most states with the thought that six yards would surely be adequate for two passing automobiles.

Recently, however, experience and government tests have demonstrated that in the interest of speed with safety a rapidly traveling car should have a ten-foot lane. Some drivers, of course, should have even more space, but highway authorities are in accord on a 20-foot width for the ordinary rural road subjected to fairly heavy traffic.

Illinois, Michigan and Wisconsin are among the states now specifying 20-foot pavements on well traveled roads. Twenty percent of the mileage of rural pavements built on Federal Aid projects last year were 20 feet in width. New York particularly, has gone in for even wider rural pavements with many being built 27, 36 and 40 feet wide.

Safety is being introduced into pavements through

other mediums, such as smooth surfaces, easier curves of a pitch suitable for fairly high speeds, wider shoulders, greater sight distance at curves, better guard rails, better grade crossing facilities such as underpasses, and better designed highway intersections.

Where traffic is quite heavy, streets and roads are in some instances being separated at intersections through the elevation of one thoroughfare over the other. The cost of such structures is soon returned through the elimination of congestion.

Less expensive but quite suitable arrangements for continuous and safe travel at intersections may be made.

Notably in New York and New Jersey, traffic circles, sometimes called rotary intersections, are in service. These consist simply of a circular pavement into which traffic pours from the intersecting highways. This avoids all left hand turns—one of the greatest contributors to accidents.

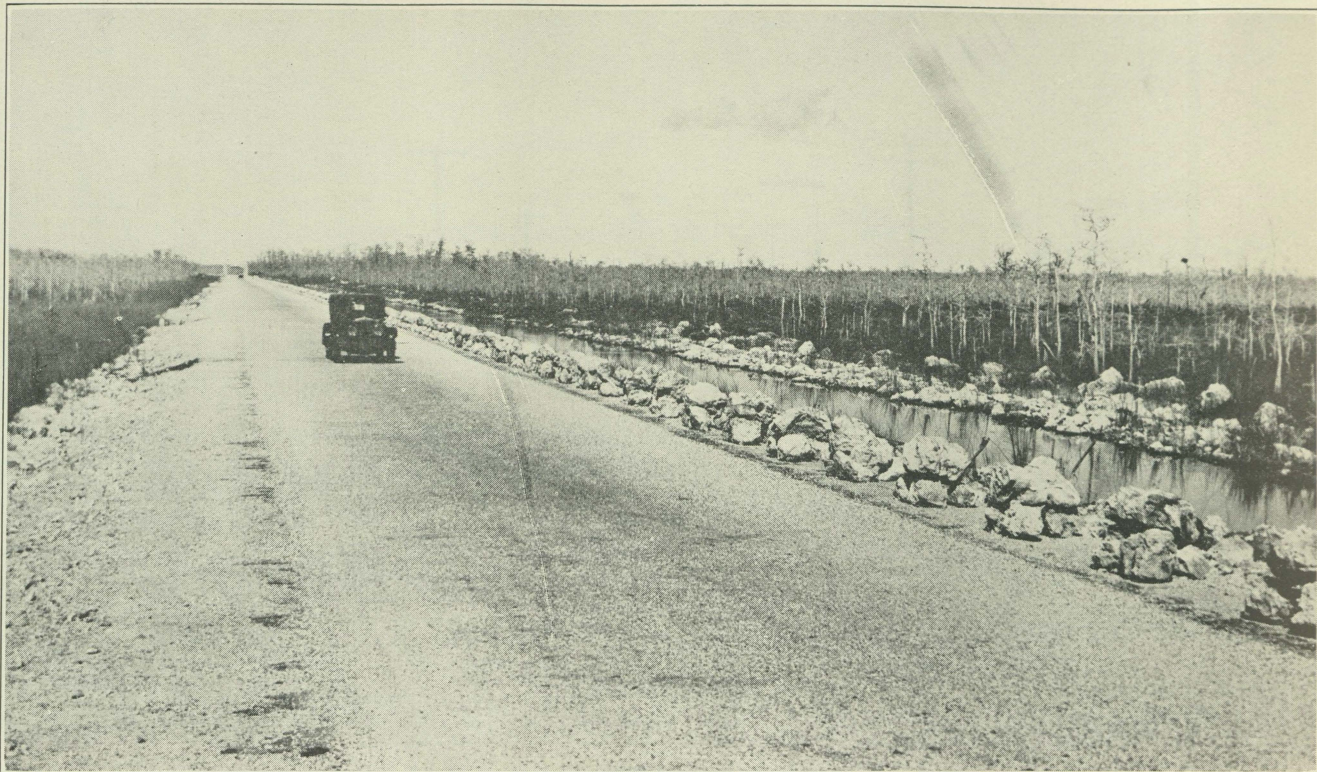
Some states are adding two extra lanes to all highways at the intersection. This extra space permits a free flow of cars. Another method is the curved intersection wherein each of the cross roads is joined to those adjacent by curve, cutting off the corner and forming a simple design similar to that on some of Grandmother's old comforters.—The Maine Motorist.



Proj. 41, Road 4, Dade County.

Contracts Awarded by State Road Department January 1st, 1929, to August 16th, 1929

Proj.	Road	County	Contractor	Length Miles	Length Feet	Contract + 10%	Type
55	14	Alachua	L. M. Gray	16.77		206,412.32	R. B. S. T.
624	50	Hamilton	Manly Const. Co.	6.23		84,888.18	R. B. S. T.
858	4	Duval	F. S. Whitney	7.00		68,438.10	Mac. Asph.
678	10	Bay	McVay Lindsay & Son	5.00		9,295.00	Hauling
695	2	Lake	Manly Const. Co.	0.40		5,380.54	R. B. S. T.
6	1	Madison	Duval Engr. & Contr. Co.	5.45		91,560.17	R. B. S. T.
669-Y	27	Collier	Kerr and Lawrence	13.55		99,705.56	Grading
854	60	Walton	G. W. Byrd	9.81		85,160.28	Sand Clay
855	60	Walton	C. C. Moore Const. Co.	9.32		90,811.26	Sand Clay
661	2	Lake	Manly Const. Co.	.14		9,813.15	Sheet Asp.
767-688	10	Bay	H. W. Johnson		75	2,567.88	Timber
40-B	4	Brevard	I. B. Purdy			10,565.72	Embankment
806-A	25	Hendry	R. C. Huffman Const. Co.	11.00		32,594.05	C. G. & G.
806-C	25	Hendry	R. B. Stuart	11.00		44,761.37	C. G. & G.
806-D	25	Hendry	R. C. Huffman Const. Co.	12.76		62,950.91	C. G. & G.
62-B	24	Osceola	Florida Bridge & Const. Co.		789	115,447.66	Conc. Bdg.
518	5-A	Lafayette	Broadbent Const. Co.	17.57		244,783.73	R. B. S. T.
587-B	5-A	Columbia	Perkins & Lawson		99	11,405.71	Conc. Bdg.
678	10	Bay	McVay Lindsay & Son	4.00		13,860.00	Hauling
715	28	Union	L. M. Gray	5.26		70,922.96	R. B. S. T.
716	28	Bradford	Duval Engr. & Contr. Co.	11.22		157,799.23	R. B. S. T.
587	5-A	Columbia	Duval Engr. & Contr. Co.	4.43		53,885.30	R. B. S. T.
718	5-A	Columbia	Duval Engr. & Contr. Co.	8.22		101,724.95	R. B. S. T.
815	54	Okaloosa	G. W. Byrd	12.50		27,434.00	Sand Clay
717-706-A	28	Bradford-Clay	Manly Const. Co.	12.06		173,340.83	R. B. S. T.
749-750	14	Gilchrist	L. B. McLeod Const. Co.	8.52		100,722.27	R. B. S. T.
820	96	Jefferson	H. D. Spangler & Co.	9.38		63,008.18	G. & D.
821	96	Jefferson	H. D. Spangler & Co.	5.13		25,478.80	G. & D.
615	5	Sarasota	L. B. McLeod Const. Co.	1.20		20,359.90	R. B. S. T.
	25	Palm Beach	Southern Asph. Const. Co.	4.00		5,575.87	S. T.
64-A	17	Hillsborough	H. E. Wolfe Const. Co.	9.609		257,589.40	Concrete
64-C	17	Hillsborough	H. E. Wolfe Const. Co.	9.61		239,707.82	Concrete
728	10	Leon	Robert G. Lassiter & Co.	11.76		245,718.22	Concrete
65	5	Hillsborough	Fred D. Beasley		423.34	103,856.44	Concrete
742	13	Alachua	L. B. McLeod Const. Co.	7.65		85,343.11	R. B. S. T.
669-Y	27	Collier	Wm. P. McDonald Const. Co.	3.00		48,974.75	R. B. S. T.
695	2	Lake	Manly Const. Co.	6.03		89,689.93	R. B. S. T.
863	56	Columbia	L. M. Gray	1.476		30,078.51	R. B. S. T.
866	17	Hillsborough	Cone Bros. Const. Co.	.50		19,075.00	Asp. Block.
644-C	10	Wakulla	L. B. McLeod Const. Co.	5.05		89,542.16	R. B. S. T.
68-A1	4	Palm Beach	Powell Brothers		199.19	62,038.95	Concrete
68-A1	4	Palm Beach	Nashville Bridge Co.		40.0	27,199.70	Bascule
68-A2	4	Broward	Foley & Milane		46.5	27,703.83	Concrete
68-A3	4	Broward	Foley & Milane		46.5	24,259.40	Concrete
63-B1	4	Palm Beach-Broward	W. S. Lockman Const. Co.		191.12	57,531.88	Concrete
63-B1	4	Palm Beach-Broward	Nashville Bridge Co.		60.0	31,537.00	Bascule
63-B2	4	Broward	Murphy Const. Co.		203.81	50,706.64	Concrete
63-B3	4	Broward	Murphy Const. Co.		134.31	38,027.33	Concrete
721-B	3	Putnam	Austin Bros. Bridge Co.		368.58	120,321.41	Conc. & Steel
835	5	Marion-Citrus	Sahlman & Hogan Const. Co.		264.56	26,850.34	Concrete
Total				266.6	2,840.91	\$3,765,405.70	



Proj. 669-E, Road 27, Dade County.



Proj. 37-B, Road 2, Alachua County.

B. M. DUNCAN TO BECOME STATE HIGHWAY ENGINEER

(Continued from page 4.)

From 1914 to 1917 he was engineer for the Town of Homestead and with a general practice of engineering handled over a half million dollars' worth of paving, becoming well acquainted with the then comparatively unknown territory in the southern part of Dade county.

At the entry of the United States into the World War, he entered the military service and served as captain of engineers, American Expeditionary forces, 42nd Engineers, in France. His departure for France in 1917 was hastened because those in authority were confronted with road building in a very swampy country and his record in private life qualified him for the particular needs. During his war service, therefore, he was an engineer in road and bridge building.

Returning from the service in 1919, he was made engineer in charge of the construction of the Miami Causeway, a project which ran over a million dollars. From 1921 to 1923 he was again City Engineer of Homestead, handling all road and engineering problems in that section. In 1923 he became engineer for the City of Miami, which position he held through 1927, handling over \$11,000,000.00 worth of road construction.

Mr. Duncan has handled over \$15,000,000.00 of work and those for whom this work was done assert that it was done efficiently, capably and to their entire satisfaction.

It is thus seen that Mr. Duncan possesses peculiar qualifications for the work on which he is about to enter for the State. His is a record based upon educational equipment and actual experience along road and bridge construction lines, and his friends are confident that he will make a most enviable record in his new field.

Already he is making an inspection of the roads of Florida with a view to having first-hand and definite information on all of them when he enters upon the duties of State Highway Engineer.

MUST OUR FINE HIGHWAYS BE BORDERED BY BEWILDERING SIGNS, TAWDRY BUILDINGS, WEEDS, WASTE PAPER, OLD CANS?

(Continued from page 12.)

It is like having a cinder in your eye. Even the Royal Gorge is disappointing to a man busy with something in his eye. America is so beautiful, but man has done so many things to it that it often looks its best after a fresh fall of about six inches of snow. We have been in too big a hurry to cut things down and to cut them up, to build fast and without much thought and to make money with a rush.

We now have settled up the whole country from shore to shore and can now quietly go about the task of making the most of what we have left and of building for the future. We can afford to spend some time and effort in making things look better. Why not stop living so much of the time in the midst of bewildering signs, tawdry buildings, weeds, waste paper and old cans? There is a movement on for

attractive wayside stands, harmonious with their natural surroundings. Trees are in the nurseries ready to plant, flower seeds are cheap, exercise with a hoe is just as healthful as golf, and your neighbor can enjoy your garden with you if your hedge is not too high.

For a Beautiful America

Our country has become our common possession from the standpoint of beauty or lack of it. A little gasoline takes us wherever the roads go. If we can all get interested in a beautiful America we will become a different people and we can all enjoy again those natural charms that quietly but effectively influence our character and thinking. I am afraid we will have to expect most in this direction from our children. Too many of the old folks have become accustomed to disorder and grime and cheap junk architecture. The children of today have to live in the world of tomorrow and they might as well work to make it more liveable.

The New York Art Center, together with the Better Homes of America and a number of other local and national organizations, are interested in developing a watch-word or a slogan which will make us all think of what our country should have in the way of beauty, for only by thinking and acting can we have our eyes filled with beauty, our minds with great thoughts and our hearts with happiness.—The American City.

Outmaneuvered

"When you are driving," said the judge to the colored taxi man who had hit a pedestrian, "and you see you are going to hit someone, you should zig-zag your car."

"Dat were de trouble, boss," replied Eph; "dat's what I did, but dat man out-zig-zagged me."

A Fast Worker

There was a young maiden from Ember,
Who came to our town in September;
She got a good job,
And being no slob,
She married the boss in December.

Politeness

The sweet young thing turned to a polite young man who was showing her through the factory and said, "What is that big thing over there?"

"That is a locomotive boiler."

"Why do they boil locomotives?"

"To make the locomotive tender." And the polite young man continued to look straight ahead.—Penn State Froth.

The Motorist's Prayer

Teach us to drive through life without skidding into other people's business. Give us chains and preserve our brake linings before we go too far. Help us to hear the knocks in our own motors, but keep our ears closed to the grinding of other people's gears. Keep alcohol out of our radiators and stomachs. Absolve us from the mania of trying to pass others who are going well and fast enough. Above all, open our eyes to guiding signals, our ears to warning bells, and teach us to keep one foot on the brake.—National News.

Status of Construction

THROUGH JUNE 30th, 1929.

Proj. No.	Contractor	Road No.	County	Total Length Miles	Clearing Miles	Grading Miles	Base Miles	Surface Miles	Type	Per cent Complete
6-A	Duval Engr. & Contr. Co.	1	Madison	5.56			5.56	5.56	S.T.R.B.	90.50
52	Robert G. Lassiter & Co.	1	Escambia	10.00				4.75	Concrete	48.00
55	L. M. Gray	14	Alachua	16.44			16.44	15.00	S.T.R.B.	97.00
56	Nelson Brothers	10	Leon	17.98				17.98	Concrete	100.00
518	Broadbent Const. Co.	5-A	Lafayette	17.57			3.37	0.00	S.T.R.B.	16.00
587	Duval Engr. & Contr. Co.	5-A	Columbia	4.43			0.00	0.00	S.T.R.B.	8.21
165	L. B. McLeod Const. Co.	5	Sarasota	1.20			1.20	0.00	S.T.R.B.	87.81
624	Manly Const. Co.	50	Hamilton	6.23			6.23	4.25	S.T.R.B.	90.00
661	Manly Const. Co.	2	Lake	.14			.14	.14	Sheet Asph.	100.00
669-Y	Kerr & Lawrence	27	Collier	13.55	13.14	8.13			Graded	61.00
672	J. B. McCrary Engr. Corp.	1	Leon	9.90				9.90	Concrete	90.00
673	Robert G. Lassiter & Co.	1	Gadsden	14.97				13.33	Concrete	89.90
678	McVay-Lindsay & Son.	10	Bay	9.70			9.22	1.94	S.T.R.B.	80.00
685	State Forces	10	Franklin	18.46			18.46	9.48	S.T.R.B.	88.00
695	Manly Const. Co.	2	Lake	.40			.40	.40	S.T.R.B.	100.00
706-A	Manly Const. Co.	28	Clay	1.14			1.14	0.00	S.T.R.B.	85.00
707	Leon County Forces	43	Leon	5.31	4.88	4.25			Graded	67.00
715	L. M. Gray	28	Union	5.26			.84	0.00	S.T.R.B.	12.18
716	Duval Engr. & Contr. Co.	28	Bradford	11.22			5.04	0.00	S.T.R.B.	33.53
717	Manly Const. Co.	28	Bradford	10.93			3.80	0.00	S.T.R.B.	33.00
718	Duval Engr. & Contr. Co.	54	Columbia	8.22			3.70	0.00	S.T.R.B.	32.87
722	R. J. Carroll	48	Jefferson	8.83	8.83	8.56			Graded	98.00
724	Leon County	66	Leon	10.67	10.67	10.67		5.00	Sand Clay	94.00
728	State Convict Forces	10	Leon	11.65	11.65	11.18			Graded	97.00
732	Gilbert & Hadcock	17	Polk	8.94	8.94	7.60			Graded	85.00
733	Walter J. Bryson Pav. Co.	33	Walton	4.23	4.23	3.85		2.33	Sand Clay	85.88
634	Penton-Mathis Const. Co.	40	Walton	7.90	7.90	7.51		5.29	Sand Clay	84.78
735	Walter J. Bryson Pav. Co.	40	Walton	13.72	13.72	11.66		3.70	Sand Clay	71.91
743	Baker & Lewis	10	Bay	18.25			10.95	6.75	S.T.R.B.	54.00
749	State Convict Forces	14	Gilchrist	7.81	7.81	7.81			Graded	100.00
749	L. B. McLeod Const. Co.	14	Gilchrist	7.81			0.00	0.00	S.T.R.B.	0.00
750	State Convict Forces	14	Gilchrist	12.97	10.12	8.82			Graded	72.10
750	L. B. McLeod Const. Co.	14	Gilchrist	.71			0.00	0.00	S.T.R.B.	0.00
751	W. J. Bryson Pav. Co.	40	Walton	7.28	6.93	6.09		0.00	Sand Clay	55.09
752	W. J. Bryson Pav. Co.	40	Walton	8.72	8.46	7.41		0.00	Sand Clay	56.30
755	B. Boeth	17	Polk	11.22	11.22	9.54			Graded	85.00
763	Duval Engr. & Contr. Co.	50	Suwannee	12.34			12.34	2.47	S.T.R.B.	73.30
764	Duval Engr. & Contr. Co.	50	Suwannee	12.00			12.00	12.00	S.T.R.B.	100.00
765	Duval Engr. & Contr. Co.	50	Suwannee	6.99			6.99	6.99	S.T.R.B.	100.00
766	State Convict Forces	10	Bay	8.74	7.43	6.56			Graded	57.00
767	State Convict Forces	10	Bay	5.27	5.27	5.27			Graded	95.00
780	F. W. Long & Co.	29	Okeechobee	11.00			11.00	11.00	S.T.R.B.	100.00
781	F. W. Long & Co.	29	Okeechobee	11.00			1.75	.50	S.T.R.B.	10.00
787	State Convict Forces	10	Walton	16.29	5.69	3.74			Graded	15.00
788	W. J. Bryson Paving Co.	10	Walton	17.54	6.67	4.56			Graded	18.14
798	State Convict Forces	13	Nassau	15.03	6.50	4.13			Graded	32.10
802-A	C. C. Hayes	10	Okaloosa	8.68	7.90	6.51			Graded	73.00
802-C	Curry & Turner	10	Okaloosa	10.24	9.93	7.68			Graded	68.00
803	Collins Const. Co.	10	Okaloosa	11.13	8.35	5.56			Graded	65.40
806-A	R. C. Huffman Const. Co.	25	Hendry	11.00	8.25	3.50			Graded	37.00
806-C	R. B. Stuart	25	Hendry	11.00	5.50	2.20			Graded	14.00
806-D	R. C. Huffman Const. Co.	25	Hendry	12.76	8.30	1.92			Graded	10.00
807-A	R. C. Huffman Const. Co.	25	Palm Beach	10.82	10.82	10.82	10.82	10.82	S.T.R.B.	98.00
807-C	R. C. Huffman Const. Co.	25	Palm Beach	6.13	6.13	6.13	6.13	6.13	S.T.R.B.	98.00
815	G. W. Byrd	54	Okaloosa	13.58				1.00	Sand Clay	8.00
820	H. D. Spangler & Co.	96	Jefferson	9.38	3.75	0.00			Graded	3.00
821	H. D. Spangler & Co.	96	Jefferson	5.13	0.00	0.00			Graded	0.00
840	State Convict Forces	115	Walton	10.45	5.08	4.57			Graded	38.00
842	W. J. Bryson Paving Co.	115	Walton	10.15	5.68	2.54			Graded	27.00
844-A	State Convict Forces	115	Okaloosa	7.10	7.10	6.03			Graded	85.00
844-C	State Convict Forces	115	Escambia	5.63	5.63	4.50			Graded	81.00
845	State Convict Forces	19	Taylor	8.57	5.50	4.00			Graded	39.00
854	G. W. Byrd	60	Walton	9.81	5.88	1.96		0.00	Sand Clay	20.01
855	C. C. Moore Const. Co.	60	Walton	9.32	8.02	2.70		0.00	Sand Clay	31.66
Total complete May 31st, 1929					2879.92	2812.92	1438.60	2121.90		
Complete month of June					35.63	31.00	21.75	52.27		
Total complete May 31, 1929					2844.29	2781.92	1416.85	2069.63		

TOTAL MILEAGE COMPLETE

	Concrete	Brick	B. C.	S. A.	B. M.	Asph. Block	S.T.R.B.	S.T.S.C.	S.C.	Marl	Total
Complete to May 31, 1929	300.24	17.13	39.75	114.66	109.57	23.20	1137.35	226.39	156.73	27.58	2152.60
Complete month of June	5.35			.09			24.91		7.73		38.08
Complete to June 30, 1929	305.59	17.13	39.75	114.75	109.57	23.20	1162.26	226.39	164.46	27.58	2190.68

Reinforcing Bars for Concrete

Made in the United States
from new billet steel.
Intelligent, dependable service
by expert bridgemen.

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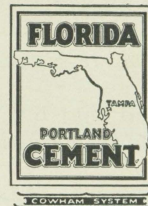
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Florida Cement

EXCEEDS

State Highway Specifications

DAILY
CAPACITY



20000

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"A Florida Product for Florida Construction"

Florida Portland Cement Co.

Tampa, Florida

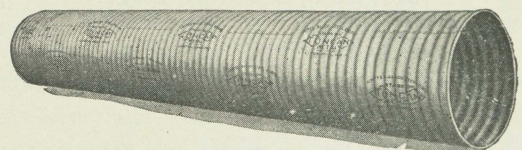
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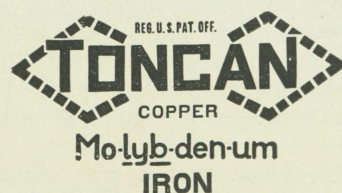


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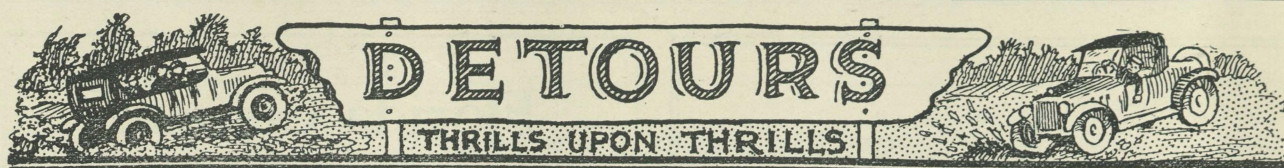
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Jacksonville, Fla.

Florida Highways Reaches Those Interested in Roads in Florida

Your Advertisement In This Space
\$12.50 per month

Ask Us for Particulars



Yes, Yes—Go On

"I don't want any callers this afternoon," said the business man to the office boy. "If they say their business is important, just tell them that's what they all say."

That afternoon a lady called and insisted on seeing him. "I am his wife," she explained.

"That's what they all say," said the office boy.

"You're all wet—where's your umbrella?"

"I forgot it."

"When did you find that out?"

"When the rain was over and I went to close it."—

Pele-Mele.

Etiquette Hints

Q.—What should the lady of the house do if the maid reports that the week-end guest has left his shoes outside the bedroom door?

A.—See if they will fit her husband.

Q.—What course should the hostess follow when she discovers a guest is peeved because the peas won't stay on his knife?

A.—Advise him to mix them with mashed potatoes.

Q.—If conversation lags at the table, what should the hostess do?

A.—Ask the guests if any of them ever had an operation.—Ed Scanlon in the Buffalo Evening News.

Oh, What a Lovely Day!

The bride's going away outfit, says a Kansas paper, was an old rose, with hat to match.

Then she ought to have gone away in a hurry.—Florida Times-Union.

A Western editor has found a good word for the saxophone. "It is the only instrument," says the Lawrence (Kan.) Journal-World, "that sounds as well when you are learning to play it as it does afterward."—Detroit News.

Big Story

King's Illness Called Serious;

Nurse Kills Policeman in Bed;

Seattle Will Express Gratitude

—Streamer Headlines in the Seattle Times.

A man went to Canada and took a high-priced wolf-hound with him in order to get rich by catching wolves, on which a high bounty was being paid. A wolf was seen, and the hound went after him.

The owner of the dog and his party followed for some miles without getting sight of either wolf or hound.

Finally they came upon a man chopping wood.

"Did you see a wolf and dog pass here," the owner asked.

"Yes, they just went by."

"How was the race?"

"Pretty hot. But the dog was a little ahead."—Pearson's Weekly.

Lowe was taken direct to St. Vincent's hospital from the barbershop.—Portland (Ore.) Journal.

A better break than most of us get.—The New Yorker.

He: "Joan's going to marry Bertie? Why, she's old enough to be his mother— isn't she?"

She: "You mean wasn't she?"

"Your wife does so remind me of my eldest sister."

"She reminds me a great deal of her first husband."—Tit Bits.

The talking movies are going over big in Scotland. Everyone stands out in front of the theater and listens.

Some people are born dumb, others acquire dumbness and others take their overcoats off when they're getting weighed and hold them on their arms.—Judge.

The Day of Specialization

A colored man was brought into court charged with stealing chickens. He had pleaded guilty and received sentence, when the judge asked how it was that he had been able to lift the fowls from right under the window of the owner's house when there was a savage dog in the yard.

"It wouldn't be no use, jedge," said the culprit, "to try to 'splain dis thing to you a-tall. Ef you was to try it like as not you'd get yo' hide full of shot an' you wouldn't get no chickens, nuther. Ef you want to engage in any rascality, jedge, you better stick to de bench, whah you am familiar."—The American Legion Monthly.

Getting the Low-Down

"Where's the boss?"

"Taking dictation."

"Taking dictation?"

"Yeh, over the phone."—College Humor.

A new invention is now on the market which will it is claimed, shut off the radio when the listener shouts at it. But who wants to be sticking his head out of the window and shouting all day?"—Judge.

Sweetwater (Tex.) Reporter—The laziest man so far heard from this year is an East Texan who rides in a model T Ford so he won't have to knock the ashes off his cigar!

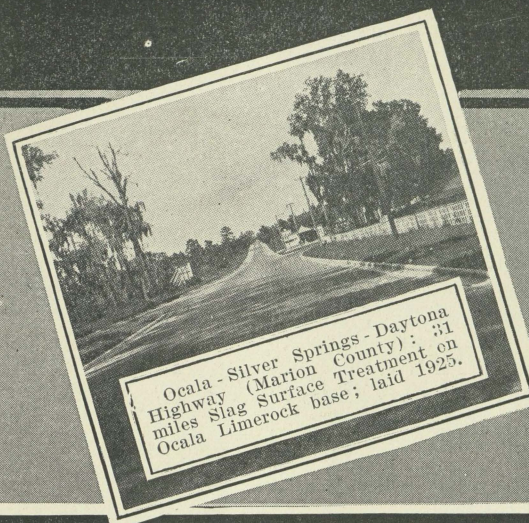
Judge: Speeding, were you? Ten dollars fine.

College Student: Can you change a twenty?

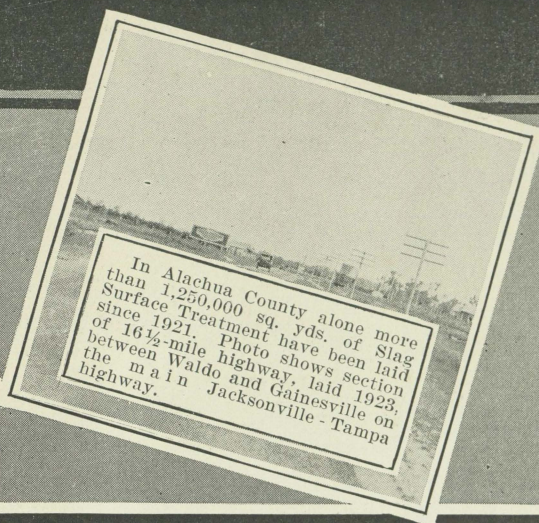
Judge: Nope. Twenty dollars fine.

He: Why do you persist in driving that antiquated wreck?

He (muchly married): I spend many evenings downtown and that car is my alibi for not getting home.

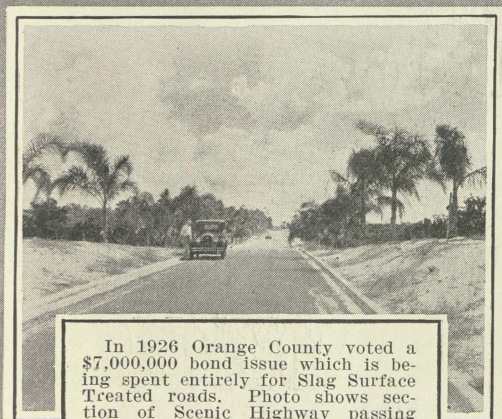


Ocala - Silver Springs - Daytona Highway (Marion County): 31 miles Slag Surface Treatment on Ocala Limerock base; laid 1925.

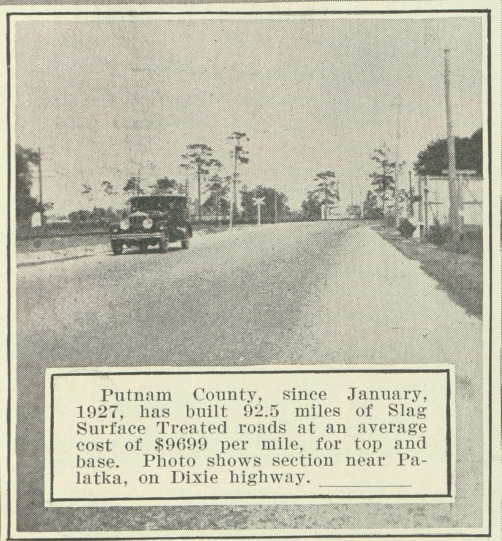


In Alachua County alone more than 1,250,000 sq. yds. of Slag Surface Treatment have been laid since 1921. Photo shows section of 16½-mile highway, laid 1923, between Waldo and Gainesville on the main Jacksonville - Tampa highway.

2235 miles SLAG SURFACE TREATMENT!



In 1926 Orange County voted a \$7,000,000 bond issue which is being spent entirely for Slag Surface Treated roads. Photo shows section of Scenic Highway passing through beautiful Avalon Groves near Orlando. In foreground stands Maj. Chas. A. Browne, highway engineer, under whose direction more than 225 miles of this one type of "non-skid" pavement have been built.



Putnam County, since January, 1927, has built 92.5 miles of Slag Surface Treated roads at an average cost of \$9699 per mile, for top and base. Photo shows section near Palatka, on Dixie highway.



FLORIDA has long since solved the problem of LOW COST improved roads and county after county has devoted the entire proceeds of its bond issue to this one tested type—Slag Surface Treatment on local limerock, shell or gravel base.

Marion County and Orange County, for instance, have completed over 225 miles of Slag Surface Treated roads, since 1922. Over 60% of the total mileage from Jacksonville to Tampa is this popular type of "non-skid" pavement. Of all the counties in Florida enjoying hard surface roads, 75% are now being served by LOW COST bituminous slag paving.

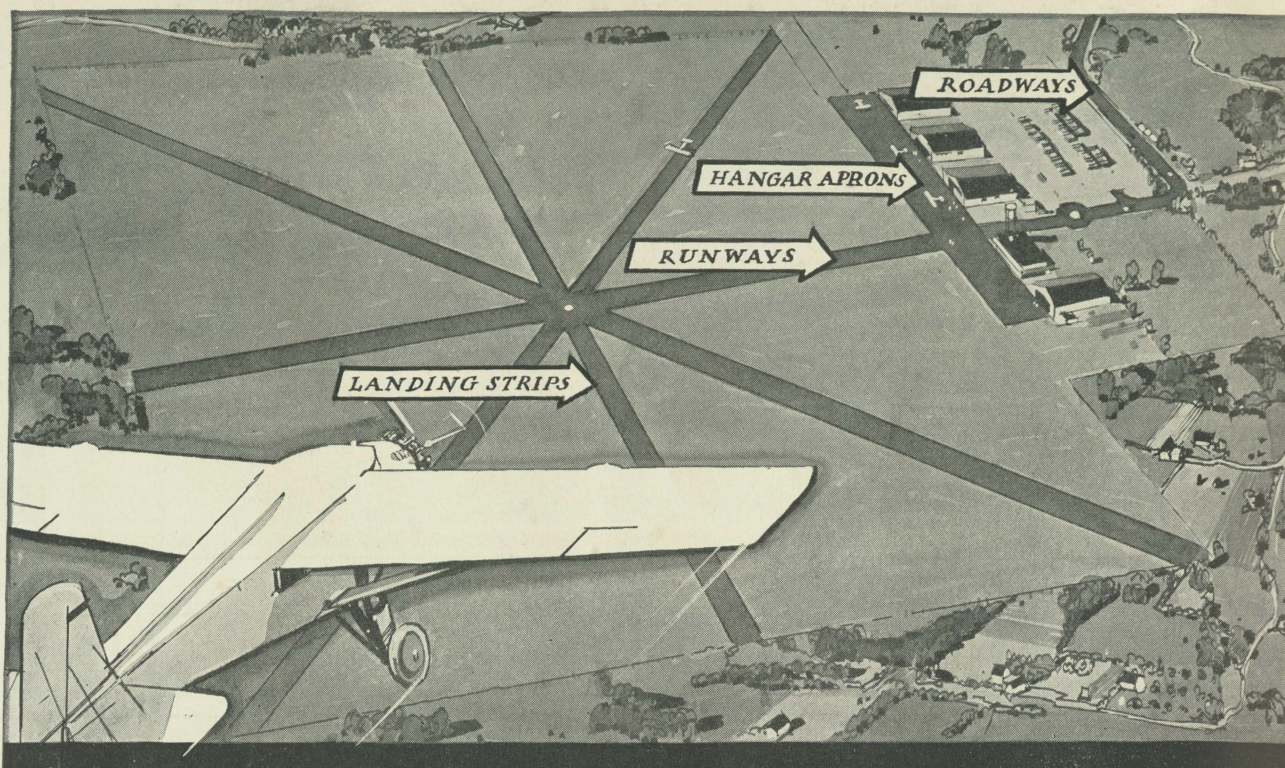
Crushed slag has proved the ideal "cover material" on account of its toughness and angularity, which provides a greater surface area for adhesion of the bituminous binder.

Blue-gray in color, it is "non-glaring." Florida road builders know from experience that it is non-skid, dustless and able to withstand years and years of hard daily service. The service record behind more than 2200 miles, much of which has been subjected to heavy traffic for five to eight years, has established these facts conclusively.

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AIRPORT PAVING at LOW cost with

SOME of the advantages of Tarmac for airport paving are—

1. Its use with local aggregate makes low cost construction possible.
2. As traffic increases at your airport, the original low-cost surface can be built up to meet any added demands which future developments may bring. (If present traffic at your airport is heavy, there is a type of Tarmac surface to carry it).

Tarmac makes smooth-riding surfaces that are resilient, dustless, skidproof in wet weather, and easy to build.

Before you prepare airport specifications—whether for landing strips, runways, hangar aprons, or roadways leading up to the airport—let us submit our suggestions.

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It is supplied in the following grades—

Tarmac P...for Cold Surface Treating, Prime Coating and Mixed-in-Place Construction.

Tarmac T...for Penetration Pavement Construction.

Tarmac A...for Hot Surface Treating.

Tarmac CP...for Cold Patching.

Tarmac HP...for Crack Filling and Hot Patching.

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